

648-11.

... NINTH EDITION ...

## CATALOGUE

General . . . . .

# Electric Light Equipment

Supplies.



## STANLEY & PATTERSON,

General Electrical Equipment Supplies,

32 and 34 Frankfort Street,

NEW YORK.







## Introductory.

♦ ■ ♦

**T**HE Electrical Trade, in referring to this copy of our Electric Light Catalogue, will note that it covers only such material as is specially adapted to electric light work, and that in addition to the material listed herein, we manufacture and carry a complete stock of both Bell and Railway supplies, and can furnish promptly anything in the electrical line, even though we do not list it.

Unless parties ordering goods have a satisfactory commercial rating, the order must be accompanied with the cash, or the goods may be sent C. O. D., by express, if one-third of the price of the goods ordered is sent to cover express charges both ways, in case the goods should not be taken out of the office, and are returned to us by the express company. In all cases where goods are sent C. O. D., charges for return of money are added.

Avoid ordering goods "Same as last," but give specific description and always order by catalogue number when it is given.

State distinctly how the goods ordered are to be shipped, whether by freight, express, mail or otherwise. If there is any preference for a certain route, it should be mentioned on the order.

Great care is used by us in filling orders promptly, packing goods properly and obtaining receipts from carriers for delivery in good condition. We cannot, therefore, be responsible for goods damaged or lost in transportation. All possible precautions, however, will be used to prevent injury or delay, and if requested, shipments will be traced.

All claims concerning the shipment of goods must be made within five days from their receipt.

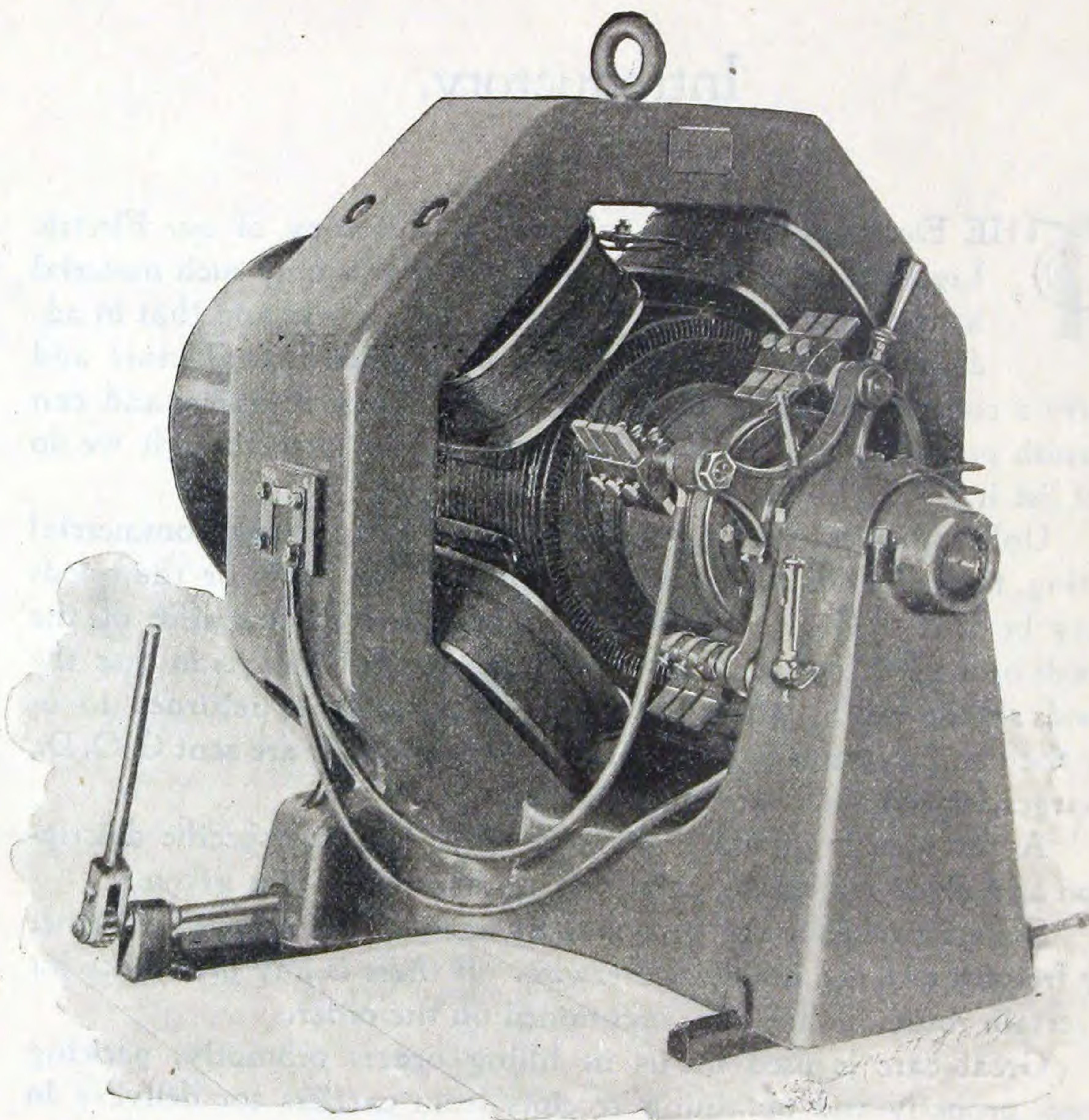
The prices contained herein supersede all former prices.

Prices are subject to change without notice.

ID 91-B1505 TCF



## Generators.

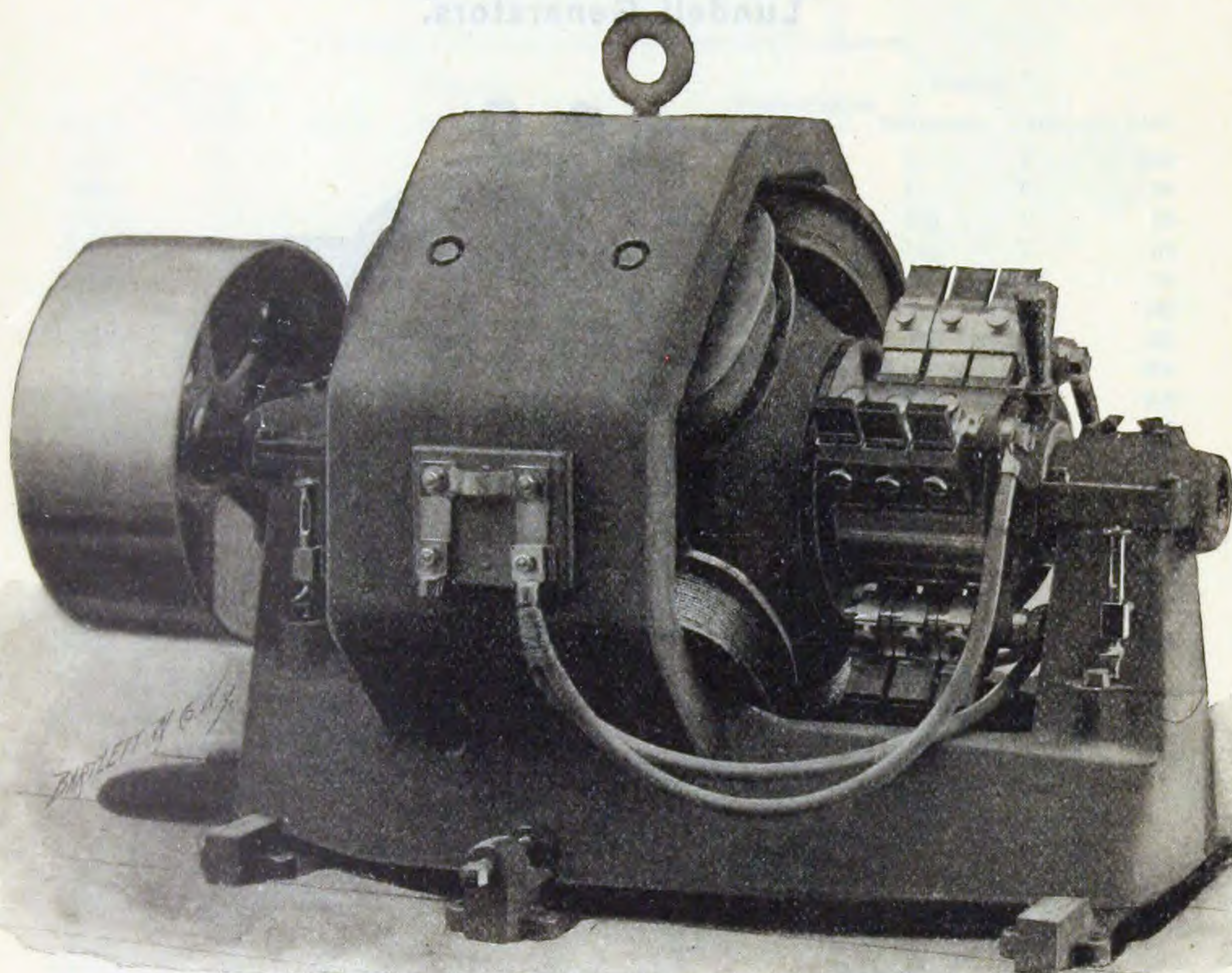


Cat. No. 10010 100-KILOWATT GENERATOR.

Cat. No.	K. W.	Speed.	Floor Space, Inches.	Pulley.	Price.
10000	5	1350	27 x 19	10 x 3	\$485
10001	7½	1250	30 x 21	11 x 3	580
10002	10	1150	34 x 23	11 x 4	710
10003	15	1050	40 x 24	13 x 5	770
10004	20	1000	43 x 27	14 x 6	1075
10005	25	950	48 x 29	15 x 8	1400
10006	30	900	51 x 30	16 x 9	1530
10007	40	850	59 x 35	} Pulley to suit purchaser.	1900
10008	60	775	63 x 44		2400
10009	80	700	72 x 47		3500
10010	100	650	79 x 47		4000



## Motors.



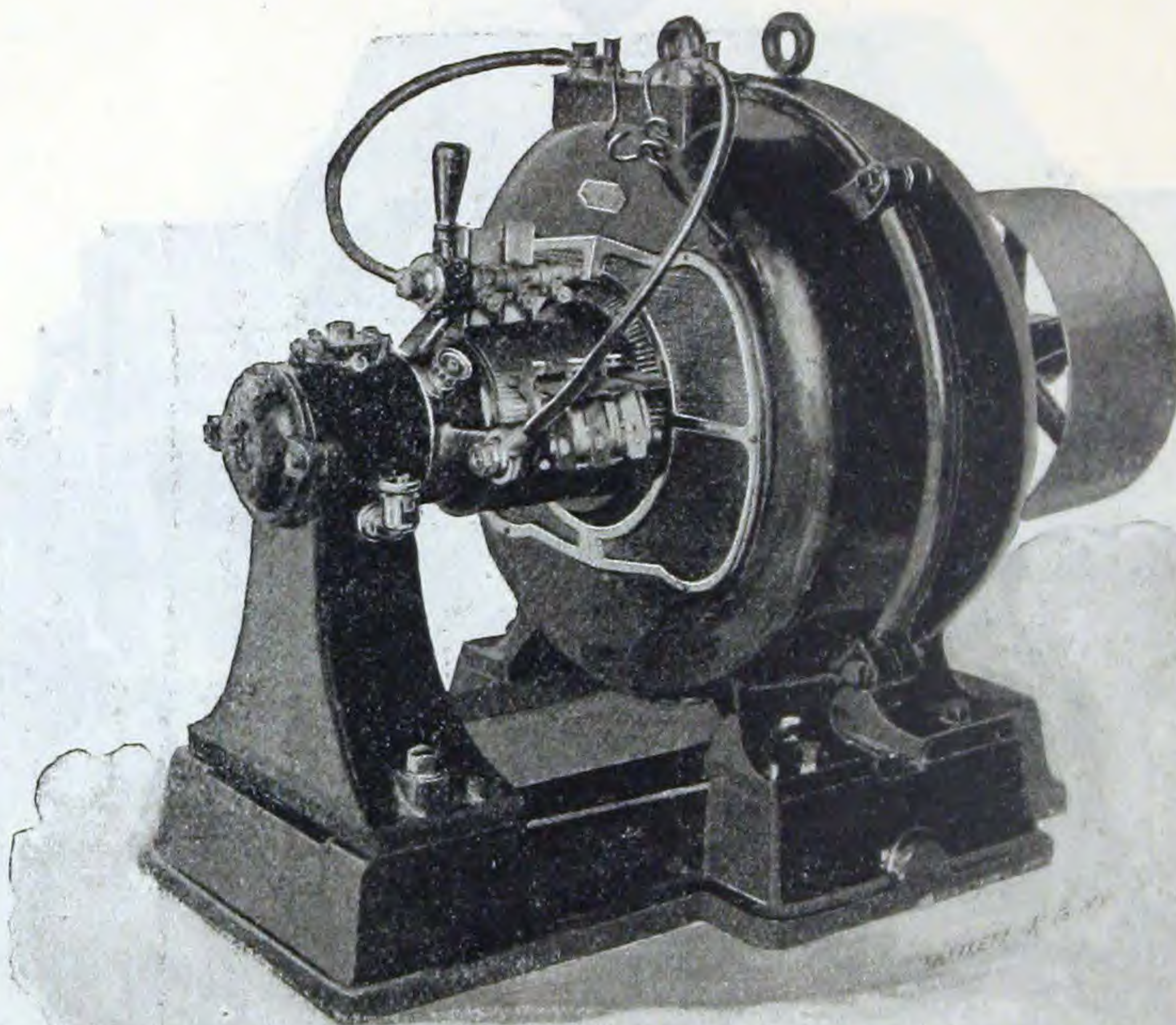
Cat. No. 10020, 25-HORSE-POWER MOTOR.

Cat. No.	H. P.	Speed.	Floor Space, Inches.	Pulley.	Price.
10011	$\frac{1}{2}$	1900	20 x 11	$2\frac{7}{8}$ x 4	\$175
10012	1	1800	24 x 22	$2\frac{1}{2}$ x $4\frac{1}{4}$	200
10013	2	1700	29 x 25	3 x $4\frac{1}{2}$	290
10014	3	1500	31 x 25	$3\frac{1}{2}$ x 5	350
10015	5	1200	27 x 19	$9\frac{1}{2}$ x $2\frac{1}{2}$	440
10016	$7\frac{1}{2}$	1100	30 x 21	$10\frac{1}{2}$ x 3	525
10017	10	1000	34 x 23	$11\frac{1}{2}$ x $3\frac{1}{2}$	650
10018	15	900	40 x 24	$12\frac{3}{4}$ x 5	750
10019	20	850	43 x 27	$13\frac{1}{2}$ x 6	1050
10020	25	800	48 x 29	$14\frac{1}{4}$ x $7\frac{1}{2}$	1400
10021	30	750	51 x 30	$15\frac{1}{4}$ x $8\frac{1}{2}$	1530
10022	40	700	54 x 32	18 x 10	1750
10023	55	650	58 x 35	20 x 12	1900
10024	80	600	63 x 44	24 x 14	2400
10025	120	500	72 x 47	30 x 18	3500

The  $\frac{1}{2}$  to 3-Horse-Power Motor is of slightly different design from the cut shown.



### Lundell Generators.



Cat. No. 10029.

Special Shunt or Compound-Wound Generators for Direct Connection  
to High-Speed Engines.

Prices furnished upon application.

Cat. No.	H.-P. of Engine.	Amperes at 115 Volts.	Lights.	K. W.	Voltage.	Approximate Speed.
10026	8	43	85	5	115	850
10027	10.5	57	115	6.6	115	750
10028	13.5	74	150	8.5	115	600
10029	18	100	200	11.5	115	600
10030	24	130	260	15	115	550
10031	31	174	350	20	115	550



## Dynamos and Motors.

Data and Prices of Lundell Motors and Dynamos.

Cat. No.	Guaranteed Brake H.-P.	Watts.	Amperes at 115 Volts.	Voltage.	Approximate Speed.	Pulley.		List.
						Diameter.	Face.	
10032	$\frac{1}{8}$	....	....	4 Battery	1900	1	V	\$28
10033	$\frac{1}{8}$	....	....	115	1900	1	V	28
10034	$\frac{1}{8}$	....	....	8 Battery	1800	$1\frac{1}{2}$	V	32
10035	$\frac{1}{8}$	....	....	115	1800	$1\frac{1}{2}$	V	40
10036	$\frac{1}{4}$	250	2.2	*115,230,500	1700	$2\frac{3}{4}$	$1\frac{1}{2}$	90
10037	$\frac{1}{2}$	500	4.3	*115,230,500	1500	$3\frac{1}{2}$	2	130
10038	1	1000	8.7	*115,230,500	1300	$4\frac{1}{2}$	$2\frac{3}{4}$	160
10039	2	1920	16.7	115,230,500	1150	6	$3\frac{3}{8}$	250
10040	3	2750	23.9	115,230,500	1150	6	$3\frac{3}{8}$	350
10041	4	3675	32.0	115,230,500	1200	7	$3\frac{3}{4}$	425
10042	**5	4525	39.4	115,230,500	1100	8	$4\frac{1}{2}$	475
10043	** $7\frac{1}{2}$	6650	57.8	115,230,500	1050	9	5	600
10044	**10	8750	76.1	115,230,500	1000	11	6	700
10045	**15	12700	118.7	115,230,500	850	13	$6\frac{1}{2}$	900
10046	**20	16700	145.2	115,230,500	800	15	7	1100
10047	**25	20650	179.5	115,230,500	750	17	8	1300
10048	**35	28500	248.7	115,230,500	650	22	10	1800

\* $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1-H.-P. motors, wound for 500-volt circuits, \$5 net extra.

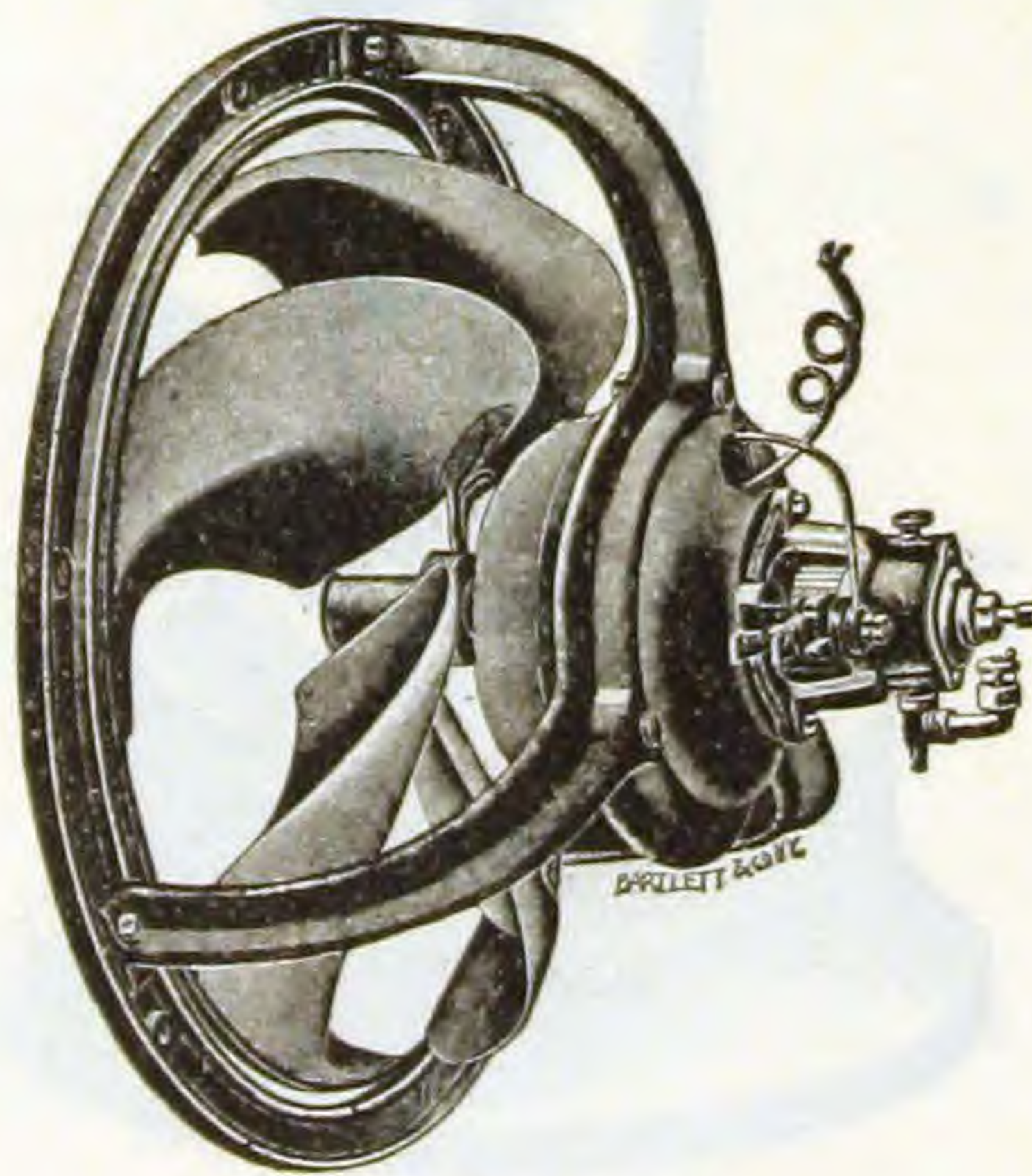
\*\*4-pole type, all smaller sizes 2-pole type.

## Combined Exhaust Fans and Lundell Motors.

Direct connected; noiseless; efficient; variable speeds.

Cat. No.	Size of Fan, Inches.	Speed.	Motor Horse- power.	Amperes.	Prices.
10049	18	1000	$\frac{1}{4}$	1.5	\$220
10050	24	775	$\frac{1}{2}$	3.	300
10051	30	650	1	5.	360
10052	36	600	2	10.	490
10053	42	550	4	20.	650
10054	48	500	5	25.	750
10055	60	400	10	30.	1200
10056	72	350	15	50.	1500

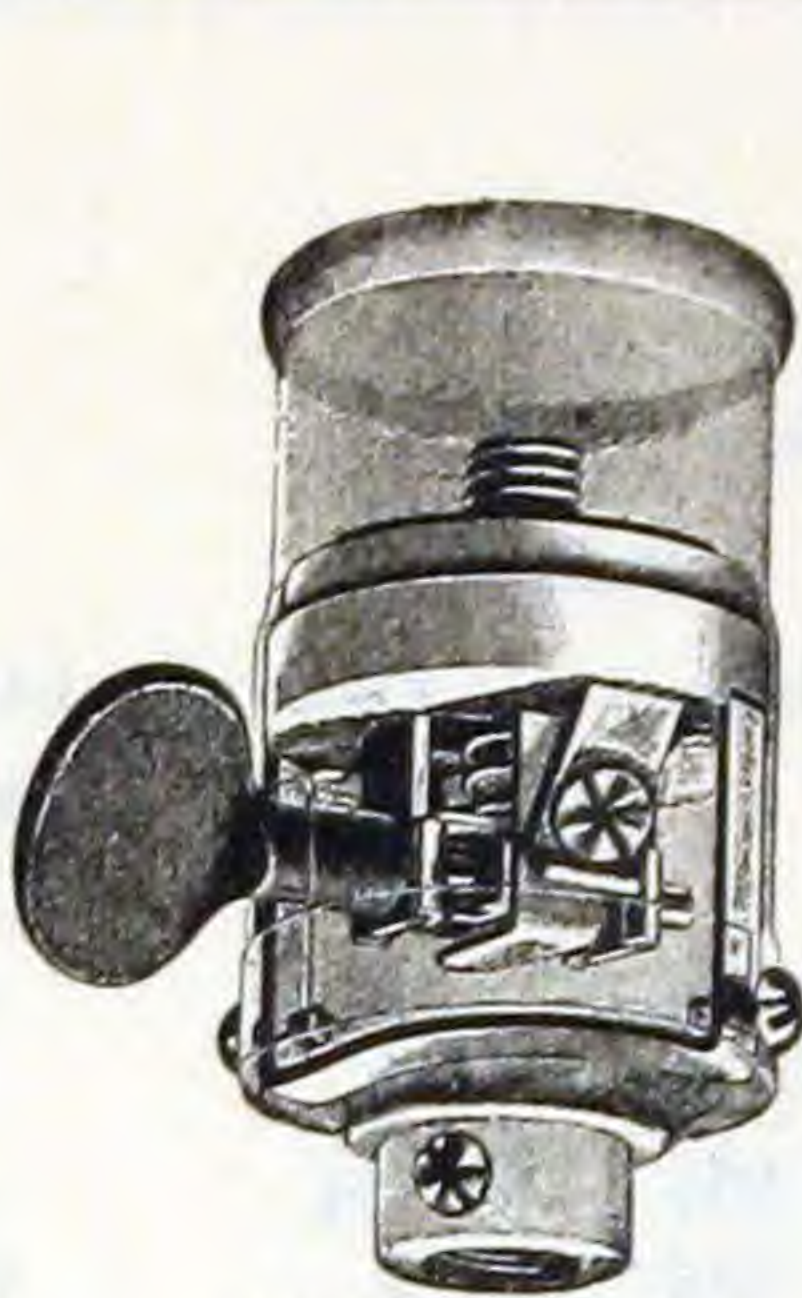
Motors are wound for 115, 230 and 500-volt circuits.  
 $\frac{1}{4}$ ,  $\frac{1}{2}$ , and 1 H.-P. Motors, wound for 500-volt circuits,  
\$5 net extra.



Cat. No. 10052.



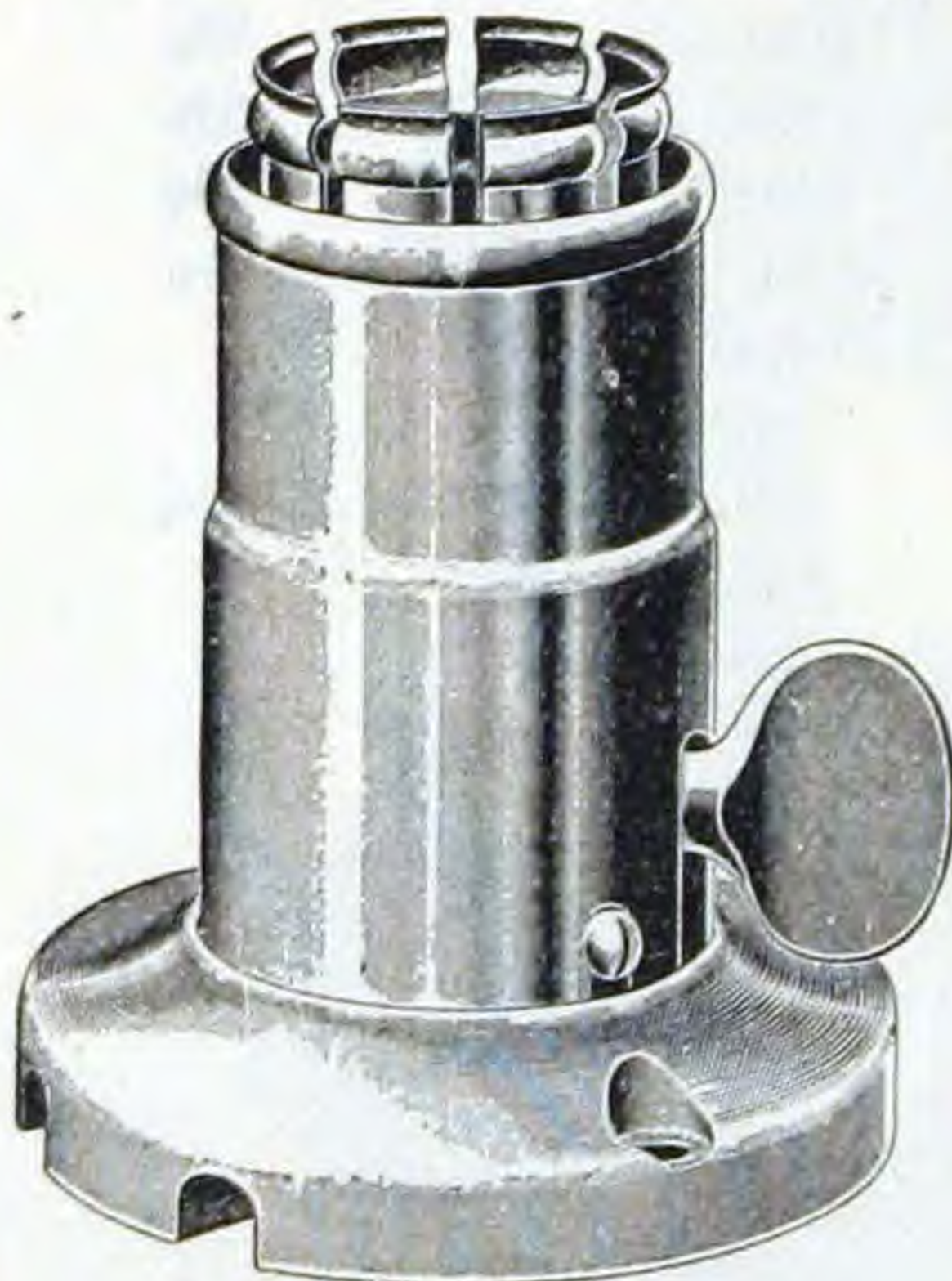
## Sockets.



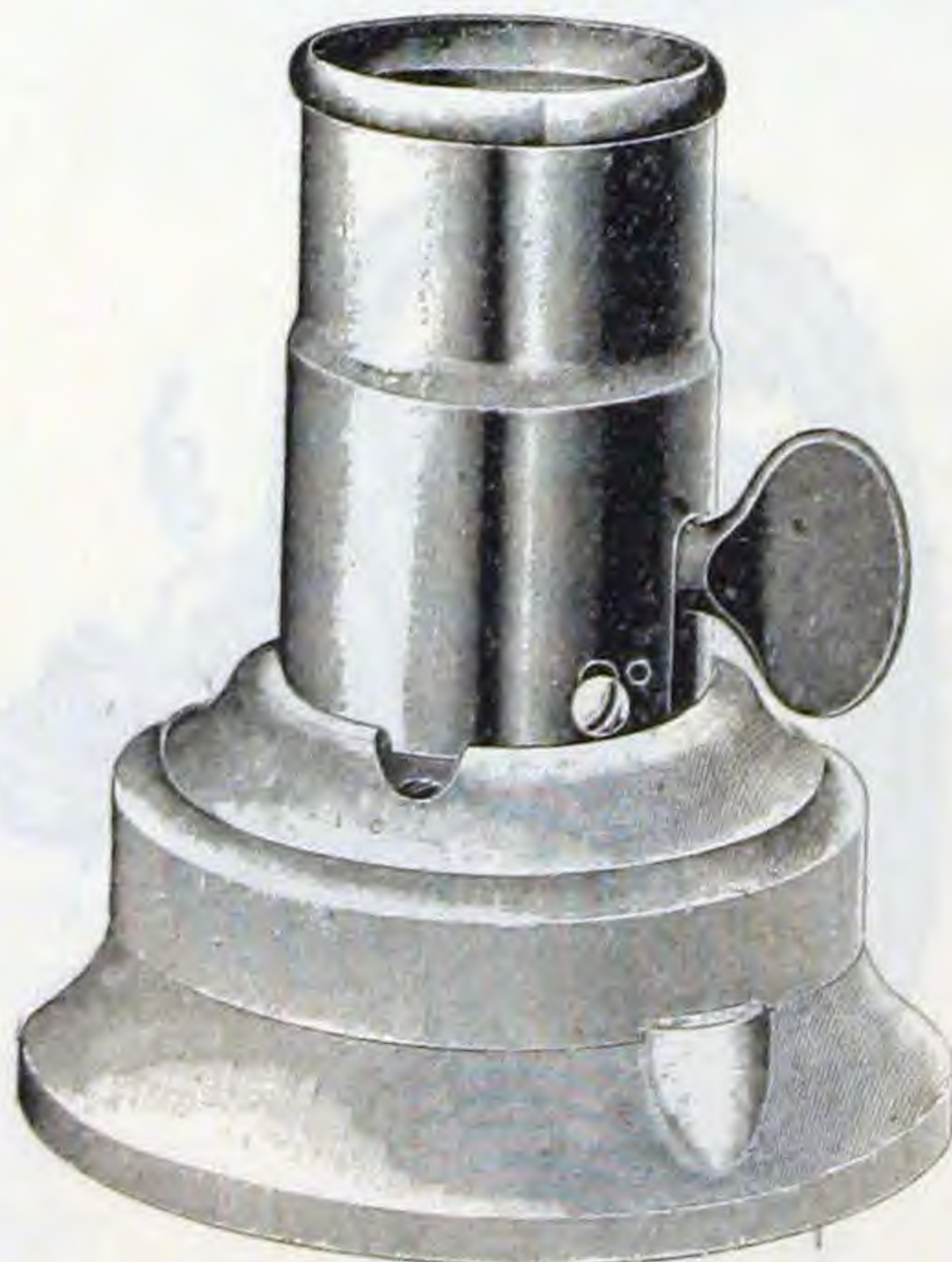
Cat. No. 10057.



Cat. No. 10062.



Cat. No. 10063.



Cat. No. 10067.

Cat. No.		Price.
10057	Thomson-Houston Key.....	\$0.30
10058	" " Keyless.....	.25
10059	" " Key Wall.....	.40
10060	" " Keyless Wall.....	.35
10061	Westinghouse Key.....	.30
10062	" " Keyless.....	.25

10063	Westinghouse Key Wall.....	.40
10064	" " Keyless Wall.....	.35

## Fusible Wall Socket.

10065	Westinghouse Key.....	.60
10066	" " Keyless.....	.50
10067	Thomson-Houston Key..	.60
10068	" " Keyless.....	.50



## Edison Sockets.

Standard sockets are tapped with  $\frac{1}{8}$ " pipe thread, but if so ordered  $\frac{3}{8}$ " pipe thread will be supplied.

The standard finish of sockets and receptacles is polished brass. Any other finish desired will be supplied as ordered.

It is important to remember that lamps of over 32 c. p. should *never* be used in *key* sockets or receptacles.

## Sockets for Lamps with Edison Base.

Cat. No.	Price.
9323 Key Socket with fibre ring.....	\$0.35
9386 Key Socket with fibre lining.....	.40



Cat. Nos. 9323  
and 9386.



Cat. No. 9364.

9364 Key Socket with removable ring.....	.40
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Cat. No. 9400.

9400 Pull Socket.....	.60
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Cat. No. 9387.

9387 Keyless Socket with removable ring.....	.35
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Cat. No. 66237.

66237 Keyless Socket for electrolier.....	.35
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Cat. Nos. 9324  
and 9392.

9324 Keyless Socket with fibre ring.....	.30
9392 Keyless Socket with fibre lining.....	.35



Cat. No. 66225.

66225 Keyless Socket with acorn shell.....	.35
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Cat. No. 9366.

## Waterproof Sockets and Receptacles.

Cat. No.

Price.

9366 Porcelain Waterproof Socket for Edison base lamps.... \$0.35



Cat. No. 60666.

60666 Hard Rubber Waterproof Socket for Edison base lamps. .60



Cat. No. 9388.

9388 Porcelain Waterproof Socket for T-H base lamps..... .35



Cat. No. 9389.

9389 Hard Rubber Waterproof Socket for T-H base lamps.... .60



Cat. No. 9407.

9407 Porcelain Waterproof Receptacle for Edison base lamps  
with leads parallel to base. .... .40

Cat. No. 9408.

9408 Porcelain Waterproof Receptacle for Edison base lamps  
with leads perpendicular to base. .... .40

Cat. No. 9411.

9411 Porcelain Waterproof Receptacle for Edison base lamps  
with leads perpendicular to base and lugs for base  
screws. .... .35



**Receptacles for Lamps with Edison Base.**

Cat. No. 9368.

Cat. No.	Price.
9368 Key Receptacle with fibre ring and porcelain base.....	\$0.40



Cat. No. 9358.

9358 Key Receptacle with removable ring and porcelain base.....	.45
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Cat. No. 9188.

9188 Key Receptacle with removable ring and concealed base.....	.45
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Cat. No. 9369.

9369 Keyless Receptacle with fibre ring and porcelain base.....	.35
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Cat. No. 66273.

66273 Keyless Receptacle with removable ring and porcelain base.....	.30
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Cat. No. 9187.

9187 Keyless Receptacle with removable ring and concealed base....	.40
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Cat. No. 50979.

50979 Keyless Receptacle with double-pole fuse.....	.55
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### Receptacles for Lamps with Edison Base.



Cat. No. 9401.

Cat. No.	Price.
9401 Keyless Receptacle, porcelain, with single-pole fuse.....	\$0.40



Cat. No. 9171.

9171 Keyless Receptacle, porcelain, with outside connections and no screw holes in base.....	.18
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Cat. No. 9402.

9402 Keyless Receptacle, porcelain, with outside connections. ....	.18
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Cat. No. 9404.

9404 Keyless Receptacle, porcelain, with rosette base.....	.40
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Cat. No. 9403.

9403 Keyless Receptacle, porcelain, with outside connections and adapted for shade-holder.....	.25
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Cat. No. 9405.

9405 Keyless Receptacle with rosette base and adapted for shade-holder.....	.50
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Cat. No. 9406.

9406 Keyless Receptacle holding lamp at angle of 45°.....	.80
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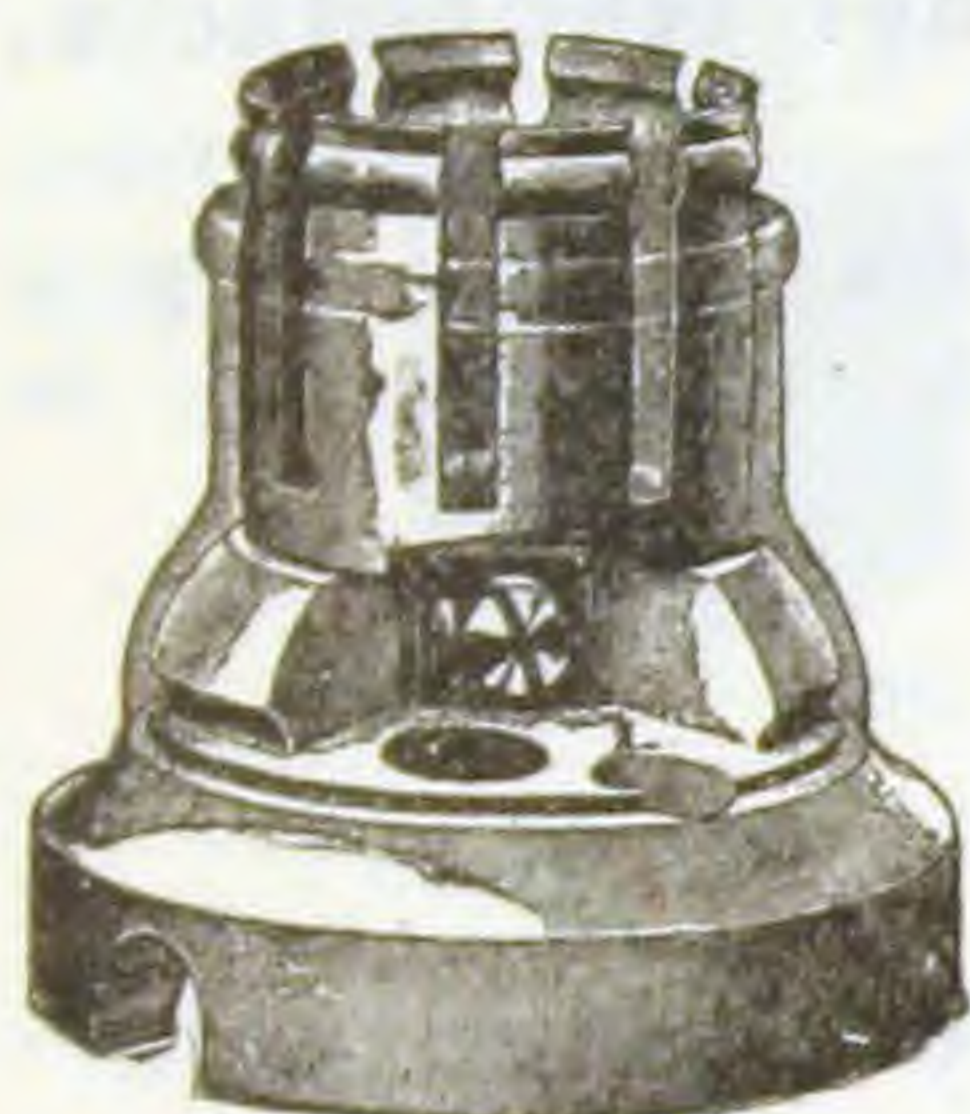


Cat. No. 9514.

9514 Keyless Porcelain Flush Pocket Receptacle.....	.40
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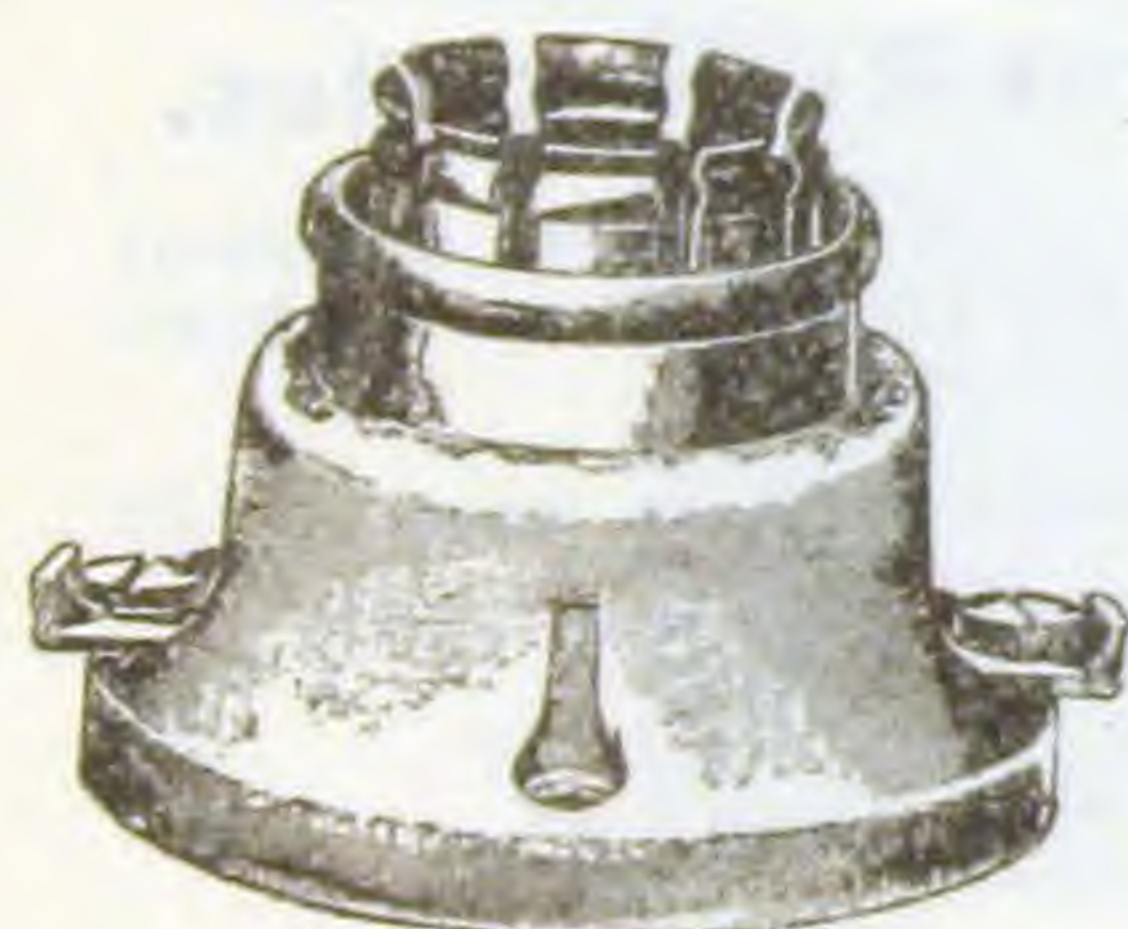
## Receptacles.



Cat. No. 10070.

### Receptacle for Concealed Work.

Cat. No.	Price.
10069 Thomson-Houston Base.....	\$0.30
10070 Westinghouse Base.....	.30



Cat. No. 10072.

### Shade Holder Receptacle for Cleat Work.

10071 Thomson-Houston Base.....	.30
10072 Westinghouse Base.....	.30



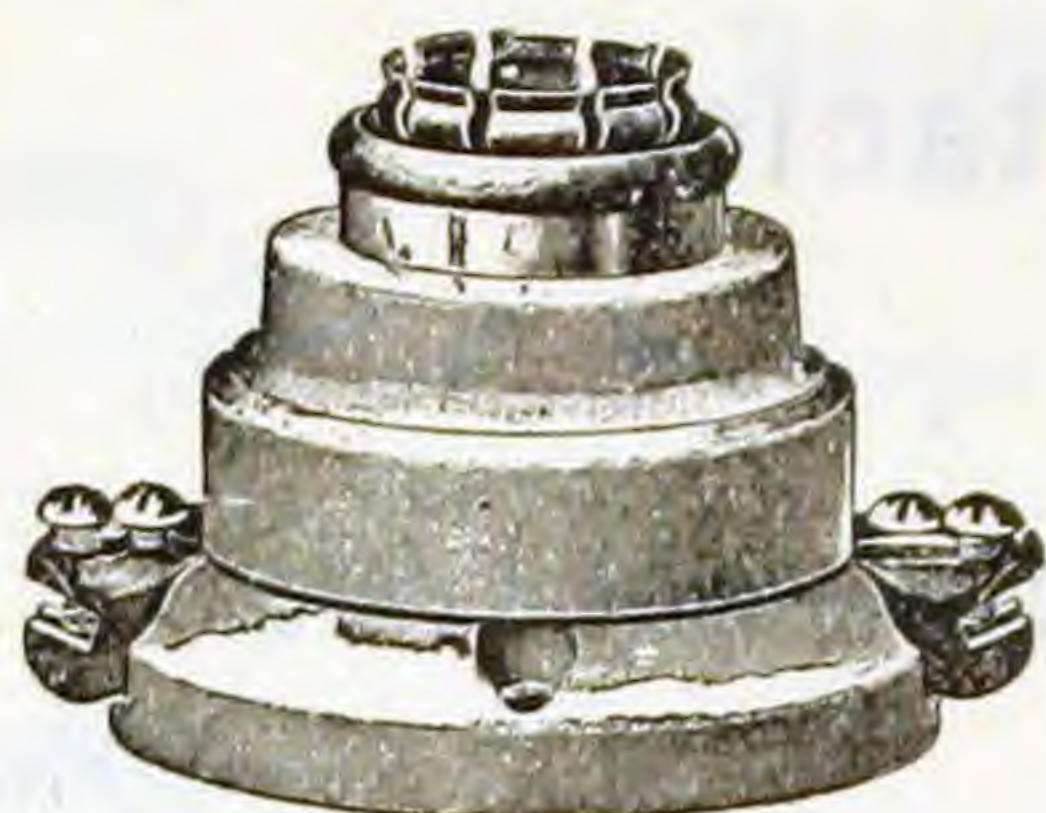
Cat. No. 10073.

### Receptacle for Cleat Work.

10073 Thomson-Houston Base.....	.20
10074 Westinghouse Base.....	.20



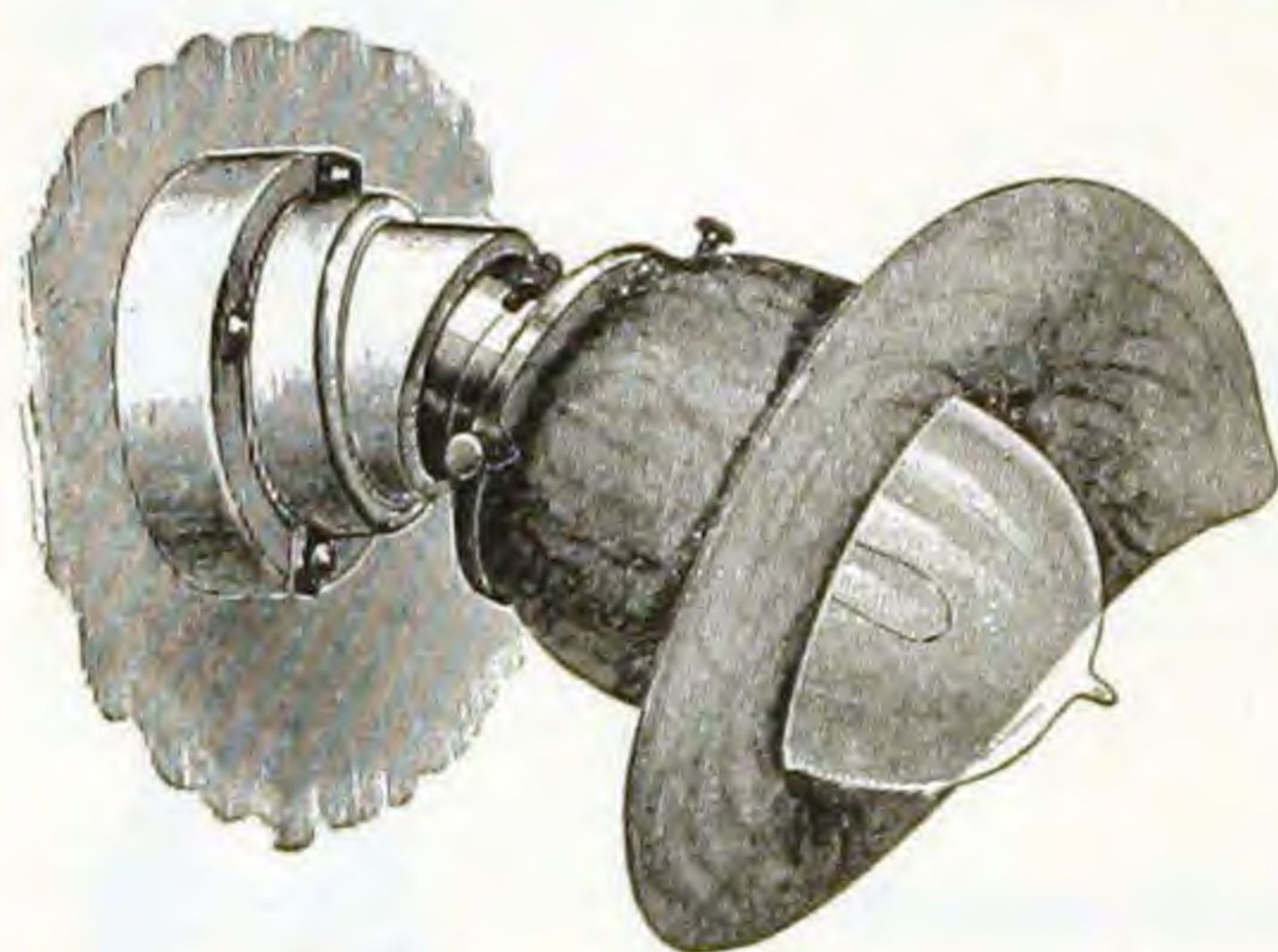
## Receptacles.



Cat. No. 10075.

### K. W. Shade Holder Receptacle.

Cat. No.	Price.
10075 Westinghouse Base, each..	\$0.50
10076 Thomson-Houston Base, each.....	.50



Cat. No. 10077.

### K. W. Shade Holder Receptacle—Angle.

10077 Thomson-Houston Base, each.....	\$0.50
10078 Westinghouse Base, each.....	.50



Cat. No. 10079.

### China Wall Socket Receptacles.

We make these Receptacles in three different styles as shown. All have backs, thus insuring high insulation.

10079 With Small Back for Edison Base, each...	.25
10080 With Small Back for Thomson-Houston Base, each.....	.25



Cat. No. 10081.

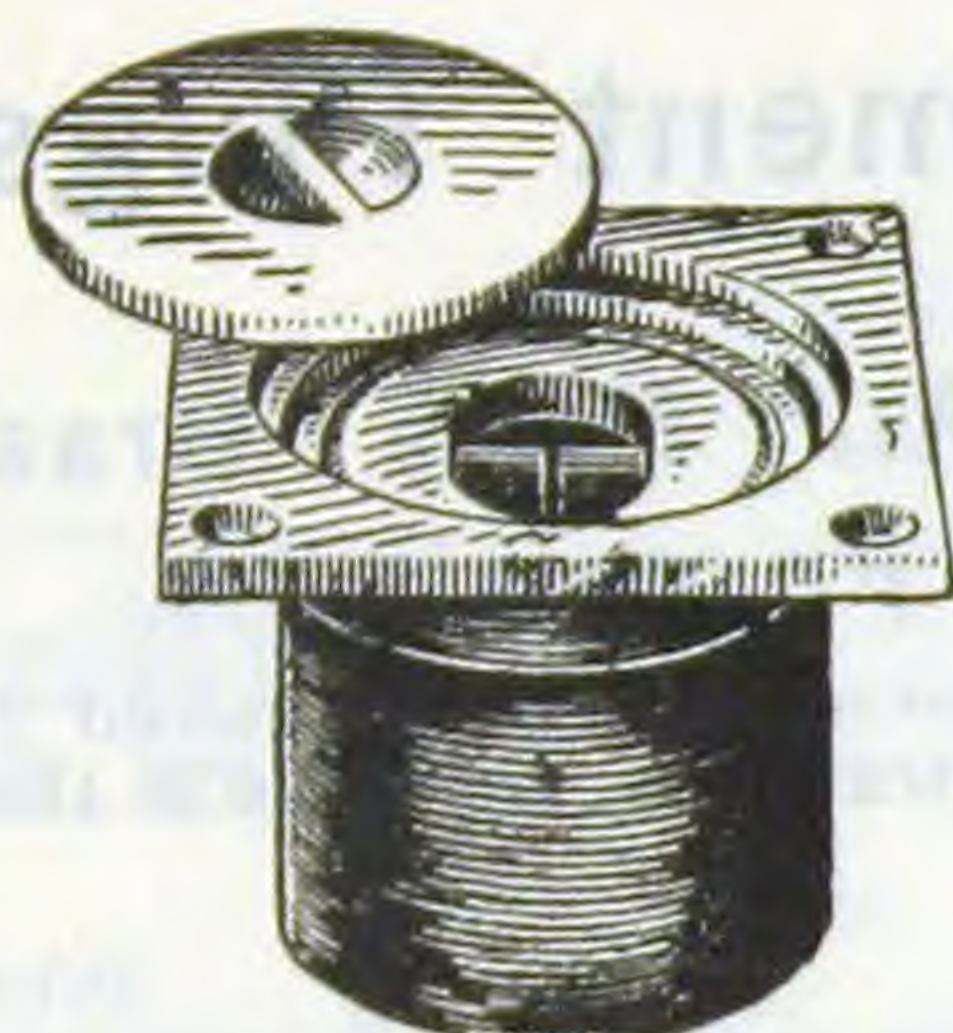
10081 With Large Back for Edison Base, each..	.30
10082 With Large Back for Thomson-Houston Base, each.....	.30



Cat. No. 10084.

10083 With Small Back and Screw for Edison Base, each.....	.30
10084 With Small Back and Screw for Thomson-Houston Base, each .....	.30





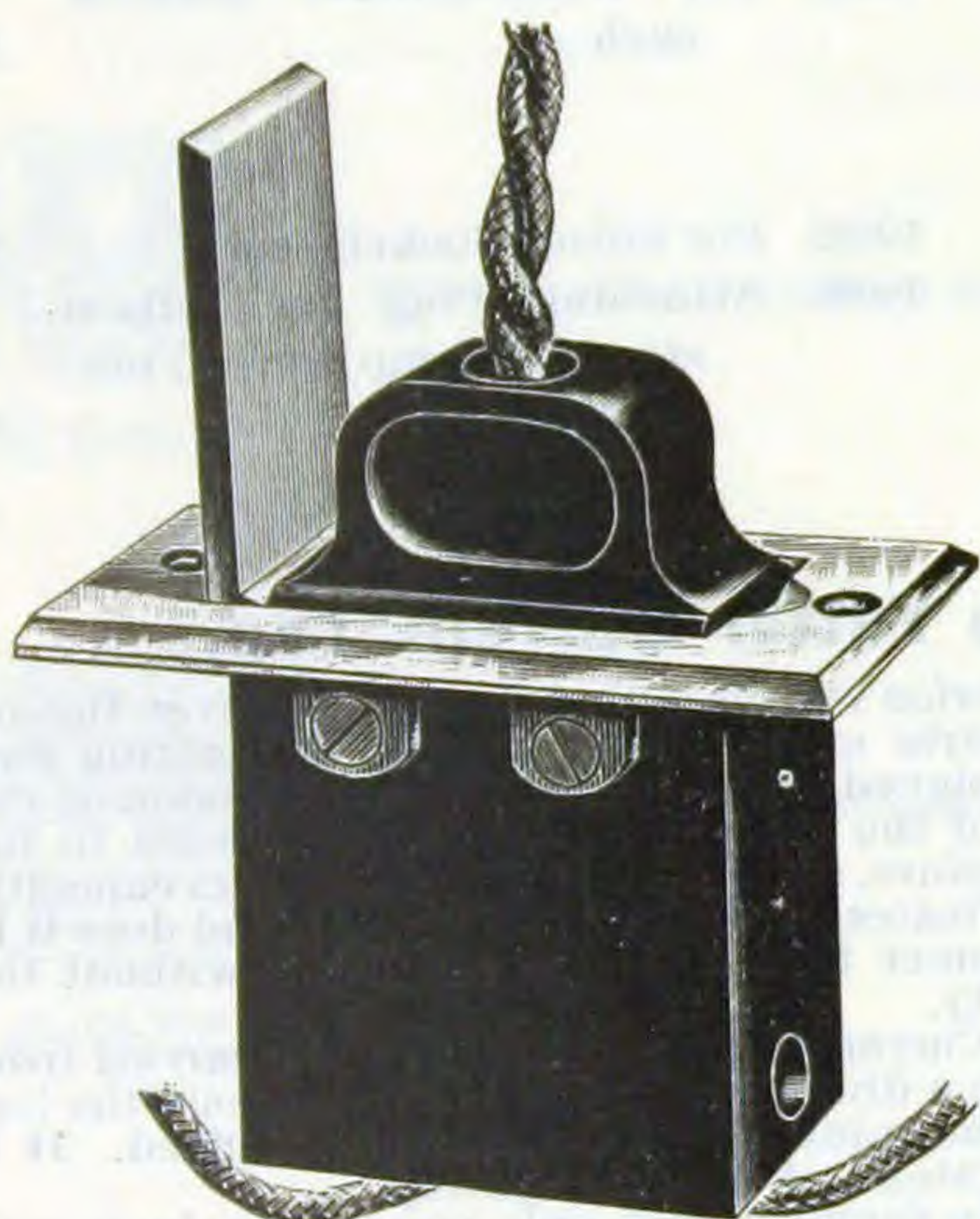
Cat. No. 10085.



Cat. No. 10086.

## Receptacles and Attaching Plugs.

Cat. No.	Price.
10085 Iron Stage Box and Receptacle, cap. 50 amp.....	\$5.00
10086 Attaching Plug for Cat. No. 10085.....	1.00



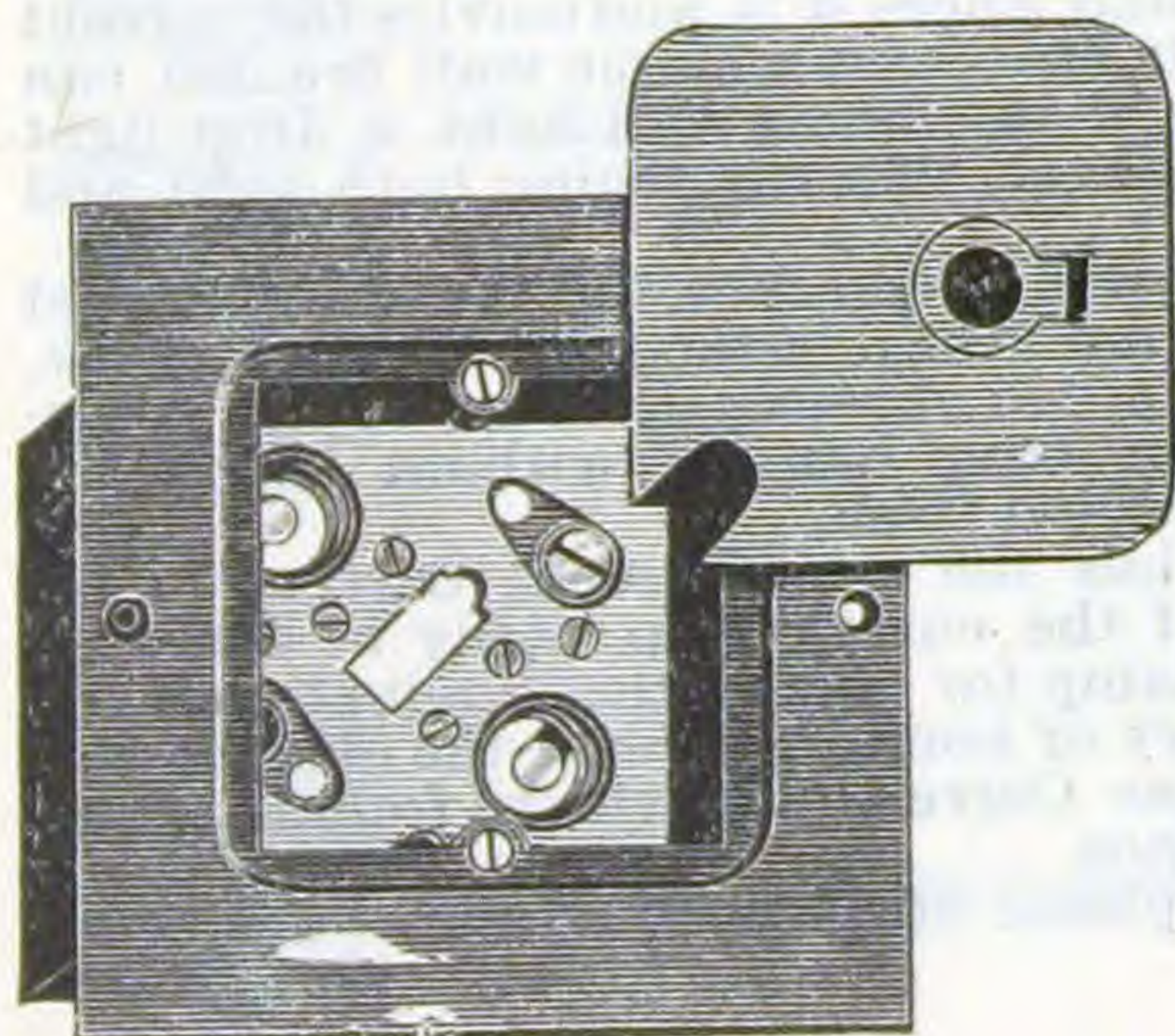
Cat. No. 10087. Half Size.

## Standard Receptacle and Plug.

Is flush with the wall or floor when plug is out, and can be finished to match the decorations of the room.

Is substantial, strong and durable.

10087 Standard Receptacle with lid, each.....	\$4.00
10088 Standard Receptacle without lid, each.....	3.50



Cat. No. 10089.



## Kelly Stage Box.

The most convenient Box made for theatre work. Approved by the Fire Department and Board of Fire Underwriters.

10089 Price each, complete.....	\$15.00
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Cat. No. 10090.



Cat. No. 10091.



Cat. No. 10092.



Cat. No. 10093.

## Attachment Plugs.

### Fusible—All Parts Brass and Porcelain.

The metal cover can be removed by giving it a quarter turn; the fuse is then easily inserted.

Cat. No.	Price.
10090 For Thomson-Houston Socket, each.....	\$0.30
10091 For Westinghouse Sockets, each.....	.30
10092 For Edison Sockets, each.....	.30
10093 Attaching Plug for Edison standard lamp socket, porcelain.....	.30

## The Vetter Current Tap.

This simple device will be found useful wherever the incandescent electric current is employed for lighting purposes, as it is designed to facilitate the transmission of the light or power of the current to any desired point in the vicinity of the fixture, and thus virtually doubles its capacity. As the name indicates, it "taps" the current, and does it in so simple a manner that a novice can use it without the slightest difficulty.

By the Vetter Current Tap the current can be carried from the electrolier to a drop light or fan motor without the loss of the lamp at the point where the current is tapped. It is made to fit all systems of electric lighting.

Many offices are supplied with only one or two single wall brackets, and the use of a drop light or fan motor generally means the loss of the lamp, by the substitution of the socket plug for the same at the fixture. The Vetter Current Tap, however, leaves the lamp where it is, and carries the current to any desired point; in fact from a single wall bracket can be obtained by means of the tap, a wall light, a drop light and current for a fan motor, thus furnishing both light and comfort.

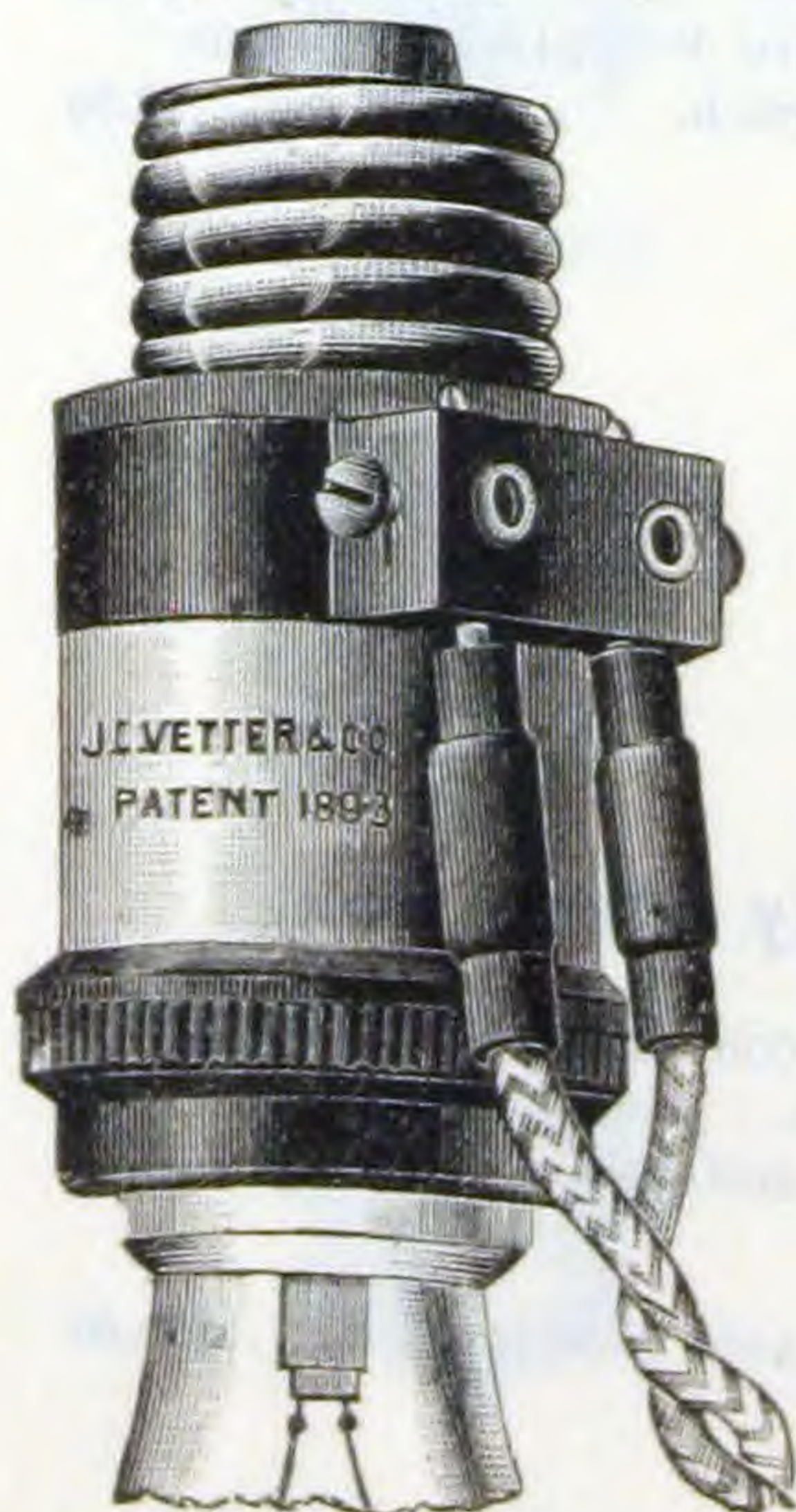
It is very valuable in the sick room for the above stated reasons, and is also found useful in factories or workrooms, where a good light is needed directly over an object somewhat removed from the lamp bracket, without losing the light from the lamp bracket itself.

The physician who has the incandescent current in his office, can by means of the current tap, easily be provided with a portable hand lamp for diagnostic illumination.

In every office, factory or home, wherever the electric current is in use, the Vetter Current Tap will be found a great comfort and convenience.

N. B.—In ordering, please state what system of electric lighting is employed.

Cat. No.	Price.
10094 Vetter Current Attachment Plug.....	\$1.00



Cat. No. 10094.



### Edison Porcelain Plug Cut-outs.

These cut-outs afford the safest as well as the most convenient and reliable method of fusing incandescent circuits. They are the only cut-outs receiving the unqualified approval of insurance inspectors and are in use in all the large Central Stations of the United States. They are for the protection of circuits having a maximum current of 30 amperes and a maximum potential of 125 volts.

When a fuse has blown it may be replaced by unscrewing the fuse plug and inserting a new plug in its place.



62569

Cat. No.

Price.

62569 Single-Pole Main Line Cut-out.....\$0.30



62965

62965 Double-Pole Main Line Cut-out. .... .50



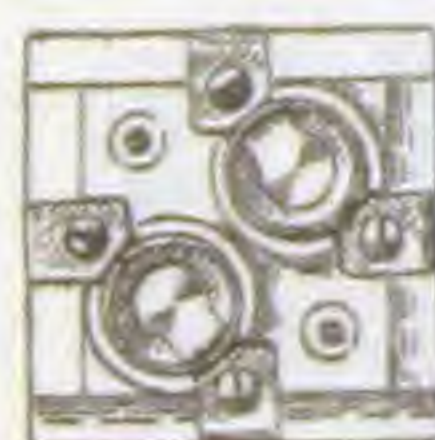
61935

61935 Double-Pole Single-Branch Cut-out..... .60



62587

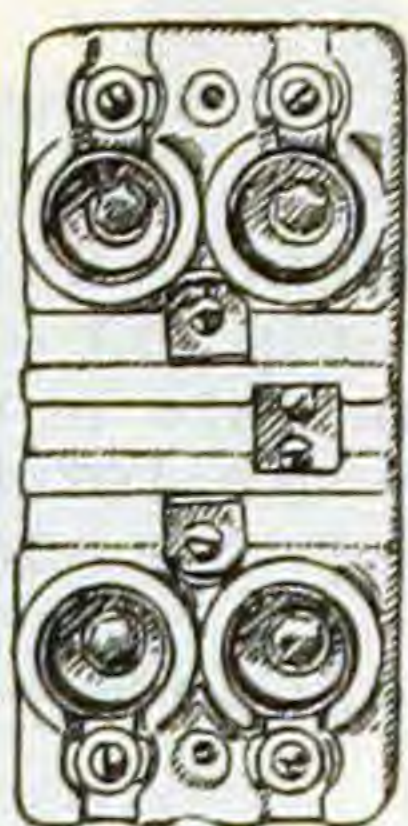
62587 Double-Pole Double-Branch Cut-out..... 1.10



8020

8020 Double-Pole Single or Double Cross-over Branch Cut-out..... .60





62199

### Porcelain Plug Cut-outs.

Cat. No.

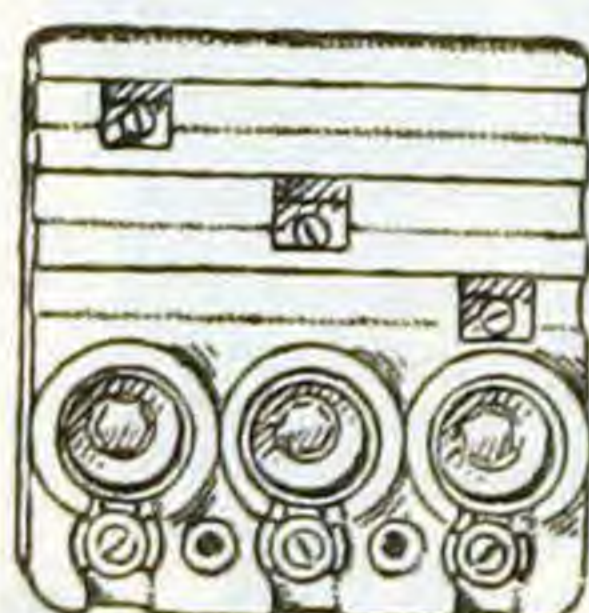
Price.

62199 Three to Two-Wire Double-Branch Cut-out.....\$1.25



62165

62165 Three-Wire Main Line Cut-out..... .80



8042

8042 Three-Wire Single Branch Cut-out..... .90



62135

62135 Three-Wire Double Branch Cut-out..... 1.50



Cat. No. 66327.

### Fuse Plugs for Use with Plug Cut-outs.

Cat. No.

Normal  
Capacity.

Price.

66327

3 Amperes

\$0.12

66329

6

.12

66331

10

.12

66333

12

.12

66335

15

.12

66337

20

.12

66339

25

.12

66341

30

.12



## Porcelain Link Fuse Cut-outs.

These cut-outs have been in use many years and are recognized as standard where link fuses are employed. They are designed for use on both two-wire and three-wire systems and are for the protection of circuits having a potential of not over 125 volts across one fuse link.

Cat. No. Price.



61569

61569 Single-Pole Main Line Cut-out, capacity 75 amperes.....\$0.75



61465

61465 Double-Pole Main Line Cut-out, capacity 30 amperes..... .70



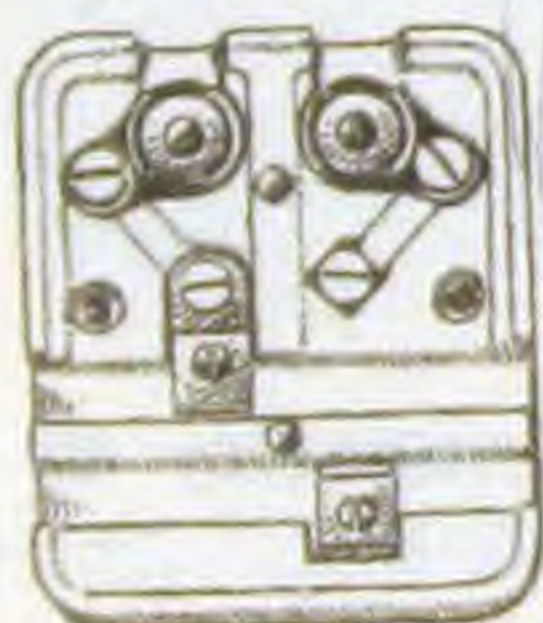
61565

61565 Double-Pole Main Line Cut-out, capacity 75 amperes.... .1.20



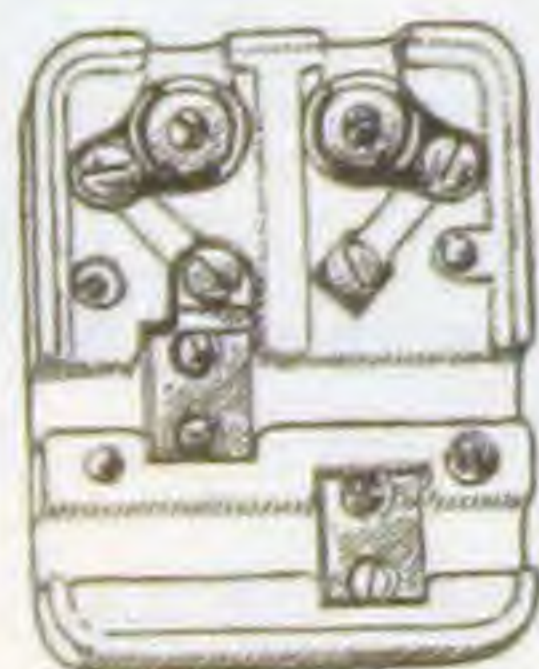
62835

62835 Double-Pole Single Branch Cut-out, capacity 30 amperes.... 1.00



61245

61245 Double-Pole Single-Branch Cut-out for wire up to  
No. 4 B. & S., capacity 75 amperes..... 1.50



61243

61243 Double-Pole Single-Branch Cut-out for wire up to  
No. 00 B. & S., capacity 75 amperes..... 2.00



61487

61487 Double-Pole Double-Branch Cut-out, capacity 30 amperes.... 1.50

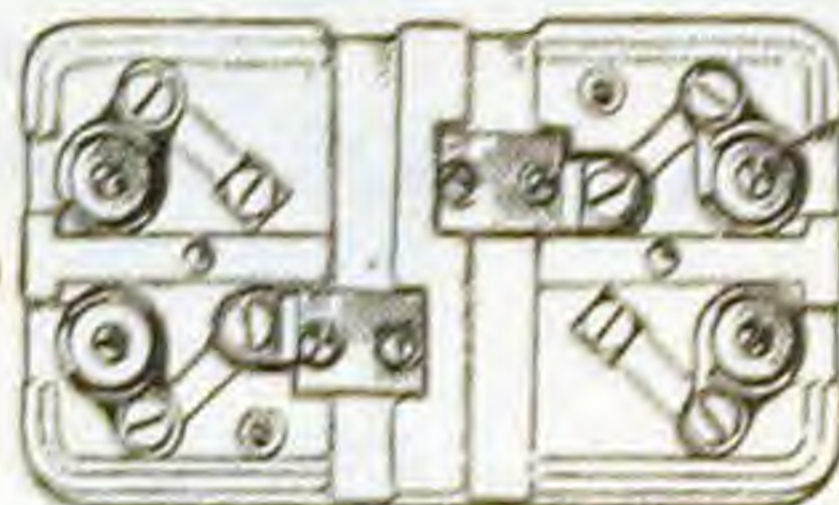




Cat. No. 61535.

### Porcelain Link Fuse Cut-outs.

Cat. No.	Price.
61535 Double-Pole Double-Branch Cut-out, for wire up to No. 4 B. & S., capacity 75 amperes.....	\$2.50



Cat. No. 61587.

61587 Double-Pole Double-Branch Cut-out, for wire up to No. 00 B. & S., capacity 75 amperes.....	4.00
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Cat. No. 61299.

61299 Three-Wire to Two-Wire Double-Branch Cut-out, capacity 30 amperes.....	1.70
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Cat. No. 61265.

61265 Three-Wire Main Line Cut-out, capacity 30 amperes.....	.85
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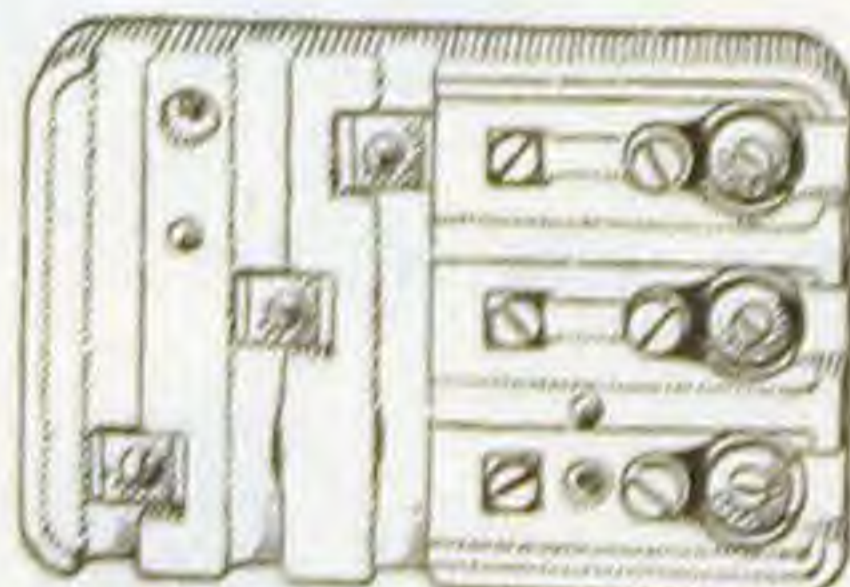
Cat. No. 61365.

61365 Three-Wire Main Line Cut-out, capacity 75 amperes.....	1.75
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Cat. No. 62235.

62235 Three-Wire Single-Branch Cut-out, capacity 30 amperes.....	1.50
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Cat. No. 61247.

61247 Three-Wire Single-Branch Cut-out, capacity 75 amperes.....	2.50
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Cat. No. 61235.

61235 Three-Wire Double-Branch Cut-out, capacity 30 amperes.....	2.25
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## Bryant-Edison Main and Branch Blocks with Mica Cover.

Cat. No. Price.

10095 No. 1435, each.....\$0.90



Cat. No. 10095—1435.



Cat. No. 10096—1465.

10096 No. 1465, each..... .77



Cat. No. 10097—1437.

10097 No. 1487, each..... 1.80



Cat. No. 10098—2835.

10098 No. 2835, each..... 1.10



Cat. No. 10099—1565.

10099 No. 1565, each..... 1.65



Cat. No. 10100—1587.

10100 No. 1587, each..... 6.25



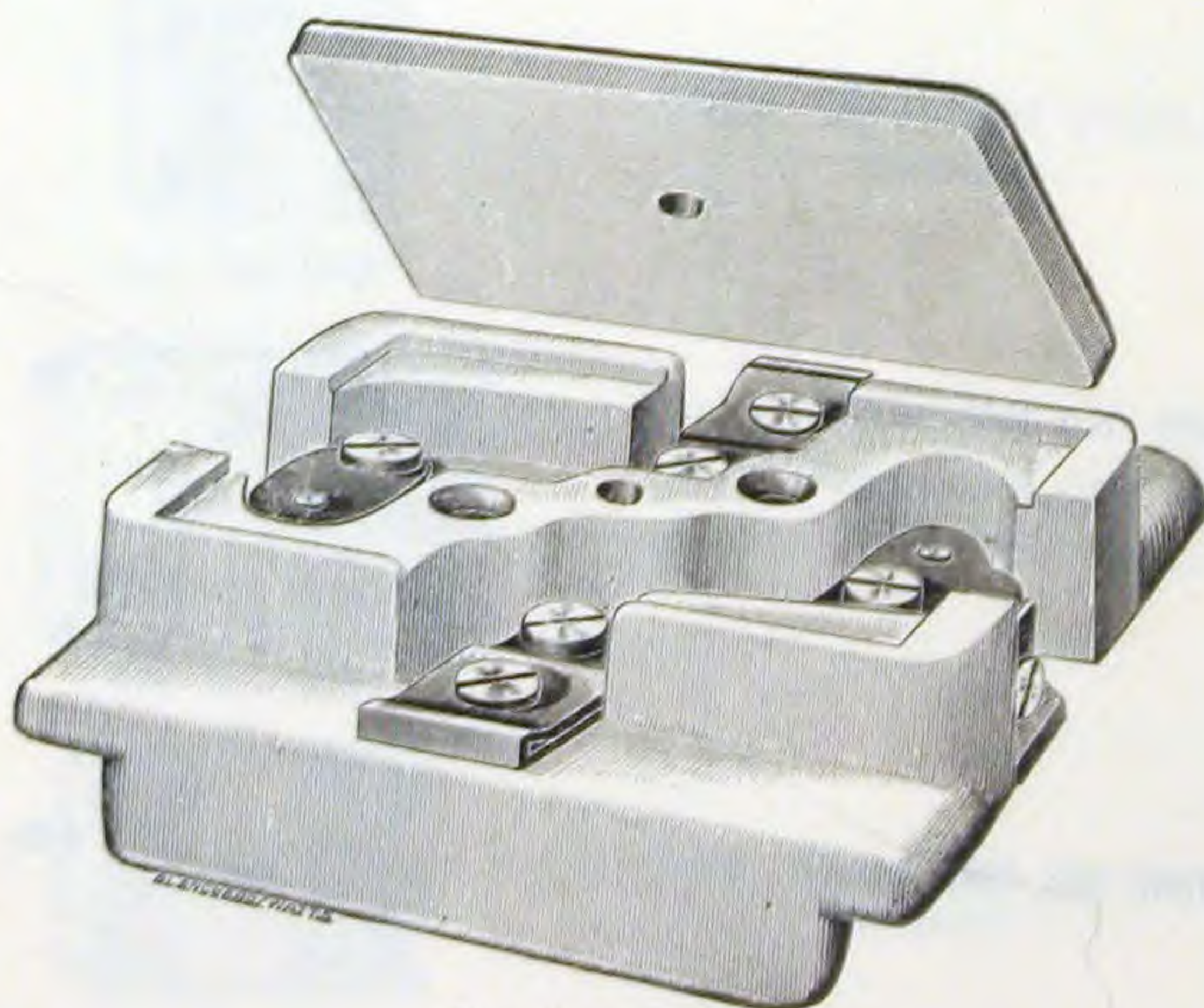


Cat. No. 10101.

## Cut-outs.

### Main Cut-outs, Covered.

Cat. No.		Price.
10101	15 Amperes, each,	\$0.25
10102	25     "     "	.40
10103	50     "     "	.90
10104	100    "     "	1.25



Cat. No. 10105.

### Branch Cut-outs, Covered.

10105	10 Amperes, each..	.25
10106	25     "     "	.45
10107	50     "     "	.95



## Ceiling Cut-outs.

### Dovetail Rosettes.



Cat. No. 10108.

Cat. No.

Price.

10108 For moulding work, each.....\$0.25



Cat. No. 10109.

10109 For cleat work, each......25



Cat. No. 10110.

10110 For moulding work, each......25



Cat. No. 10111.

10111 For concealed work, each. .... .25



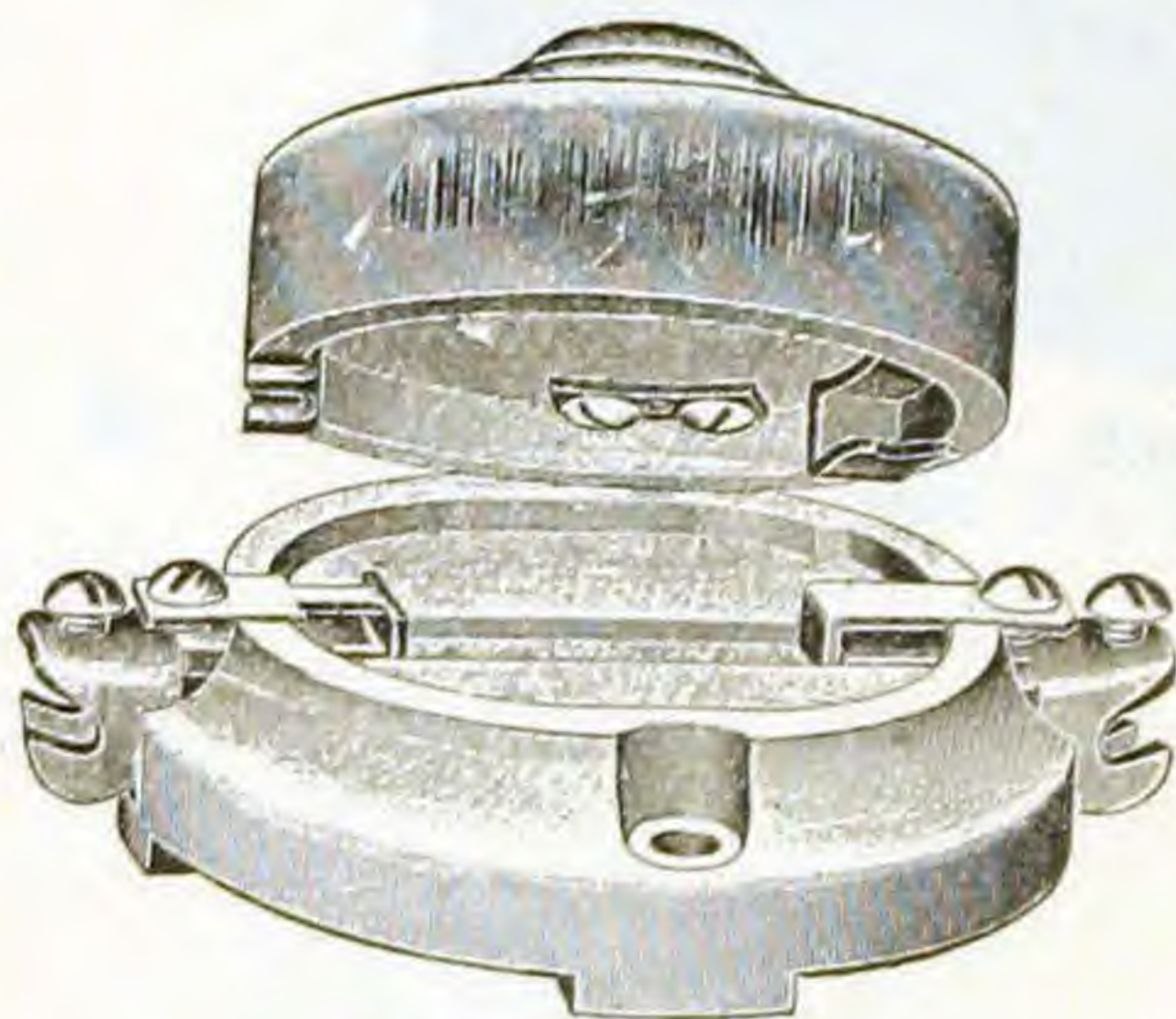
## Ceiling Cut-outs.



Cat. No. 10112.

### K. W. Cleat Rosette—Improved Side Pieces.

Cat. No.	Price.
10112 Each.....	\$0.18



Cat. No. 10113.

### Anchor Cut-out.

10113 Cleat Ceiling Cut-out.....	.20
10114 Cleat Ceiling Cut-out, solid lug.....	.25

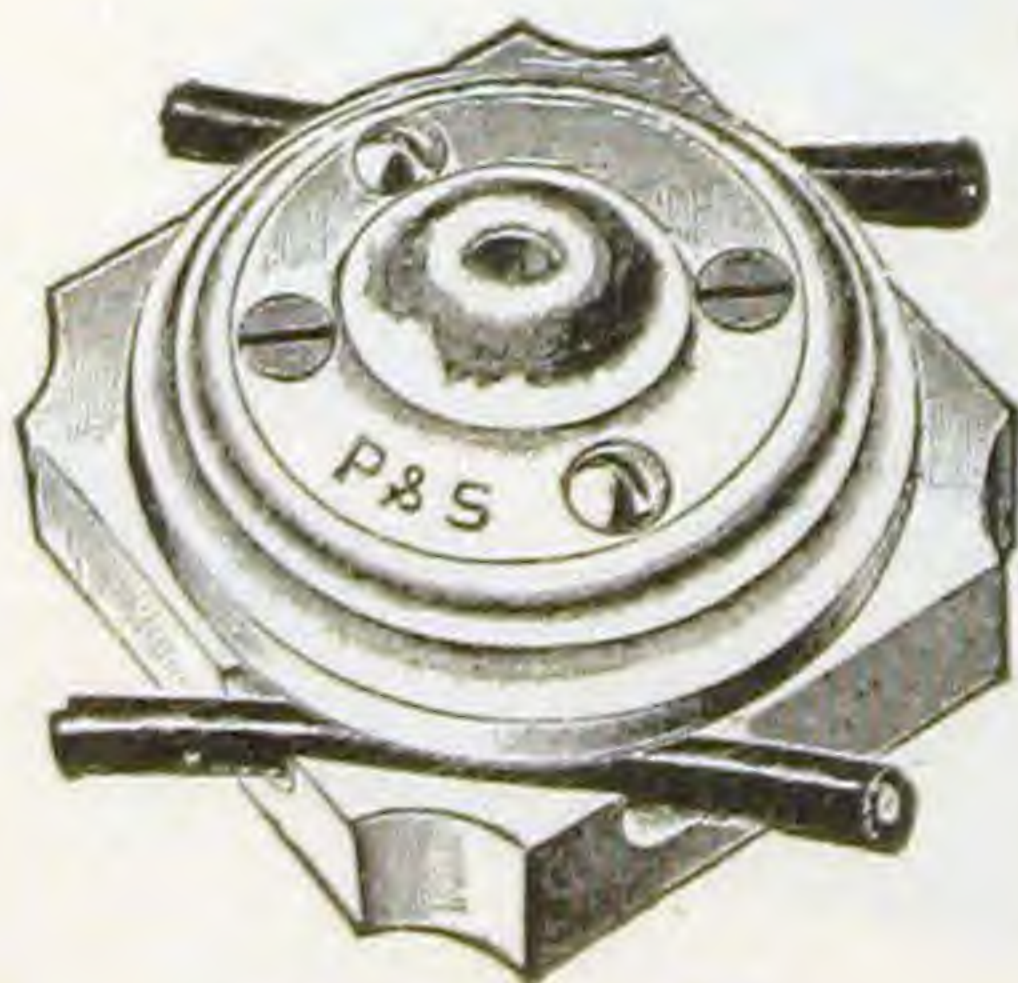


Cat. No. 10115.

### Fuseless Rosette.

This Fuseless Rosette is useful in factories and places where it is difficult to replace fuse. Five or six can be used on a branch with small branch block. It is fitted with a substantial clamp for wire, which also has a screw and washer at inner end to fasten the lamp cord to.

10115 Fuseless Rosette, each.....	.18
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Cat. No. 10116.

### Combination Rosette.

Made in three styles, viz.: for cleat and concealed; for moulding or 3 wire and concealed; full combination, for cleat, moulding, 3 wire and concealed.

10116 For cleat and concealed, each.....	.25
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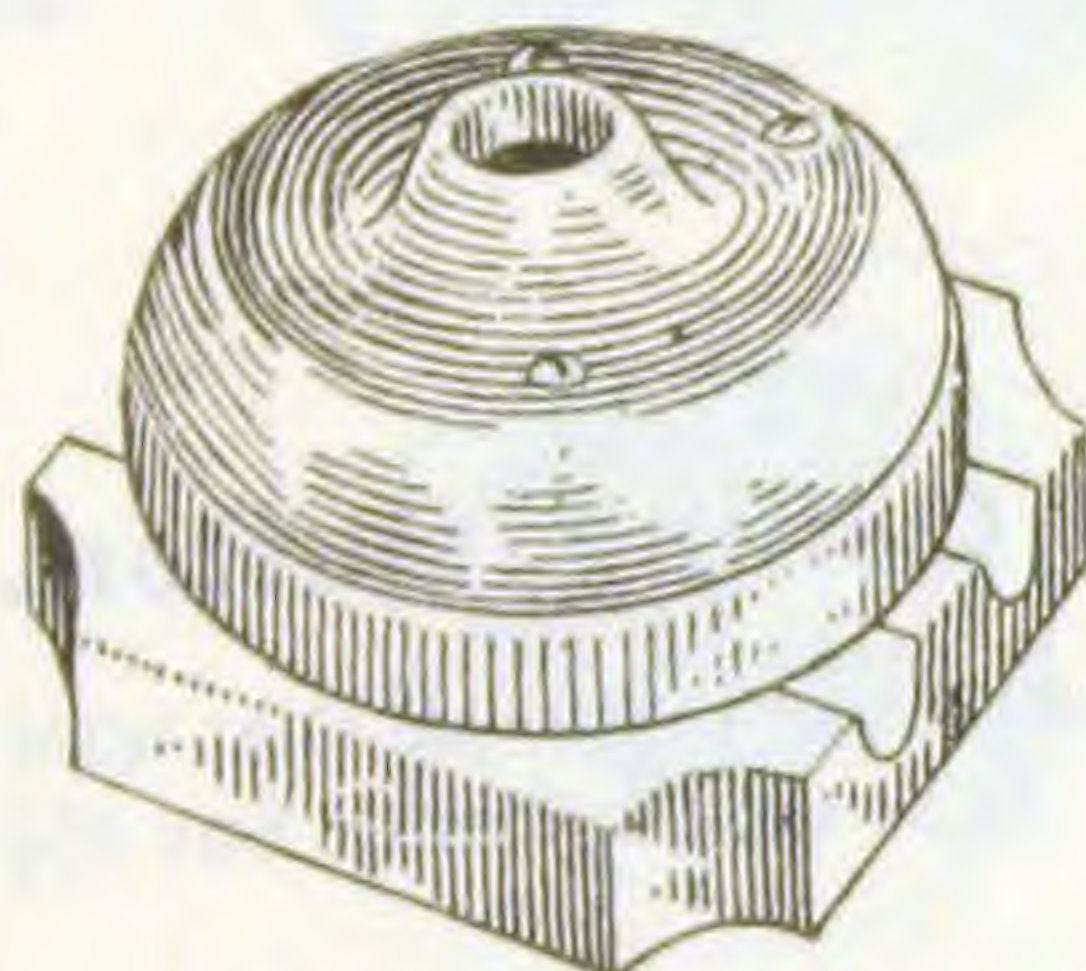


## Edison Ceiling Cut-outs and Rosettes on Porcelain Bases.



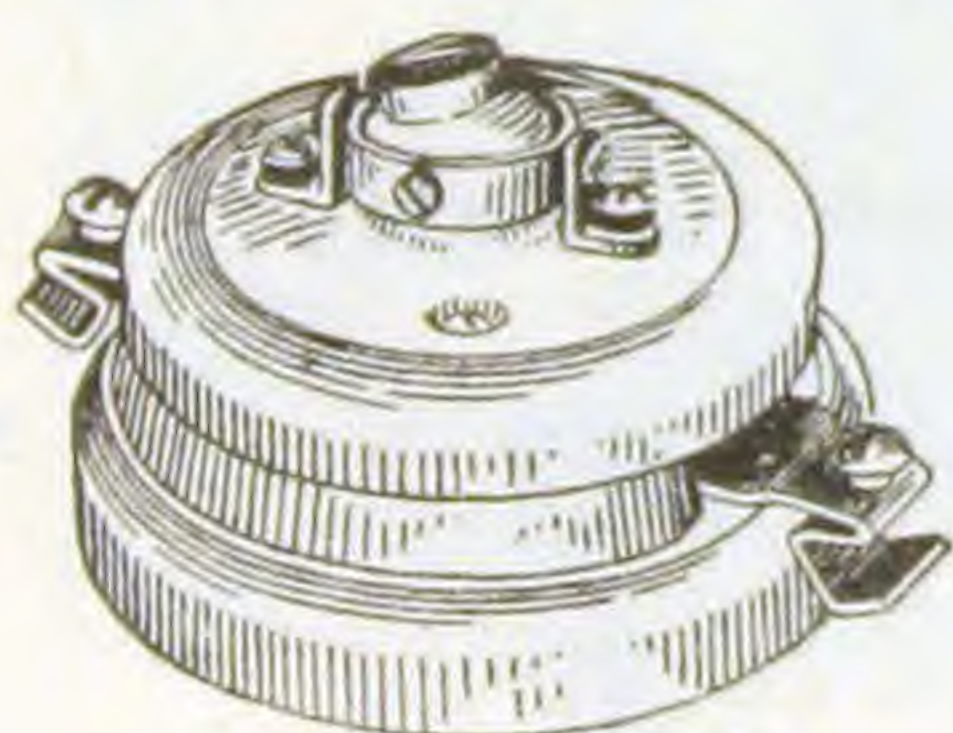
Cat. No. 60123.

Cat. No.		Price.
60123	Double-Pole Ceiling Cut-out, for cleat work.....	\$0.30



Cat. No. 60396.

60396	Double-Pole Ceiling Cut-out, for moulding work.....	.35
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Cat. No. 61023.

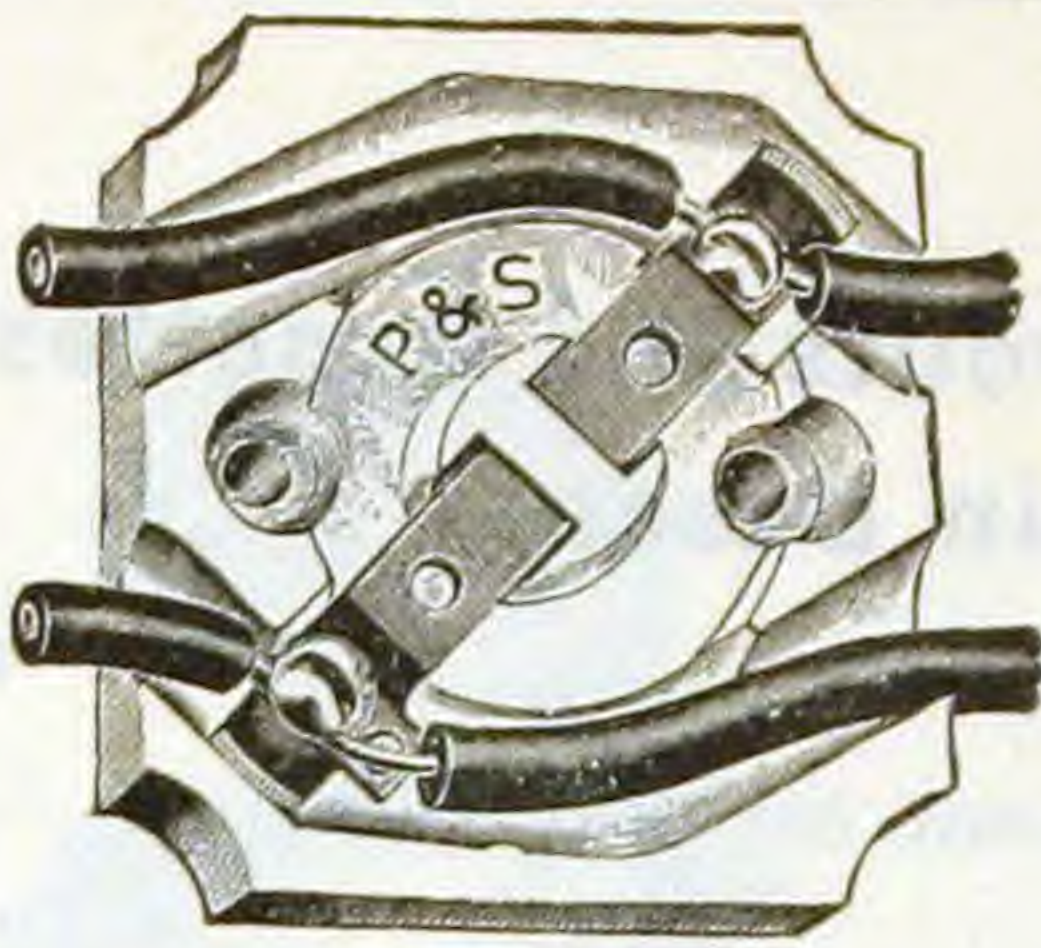
61023	Double-Pole Ceiling Cut-out, with universal joint, for use with swinging pendant.....	.55
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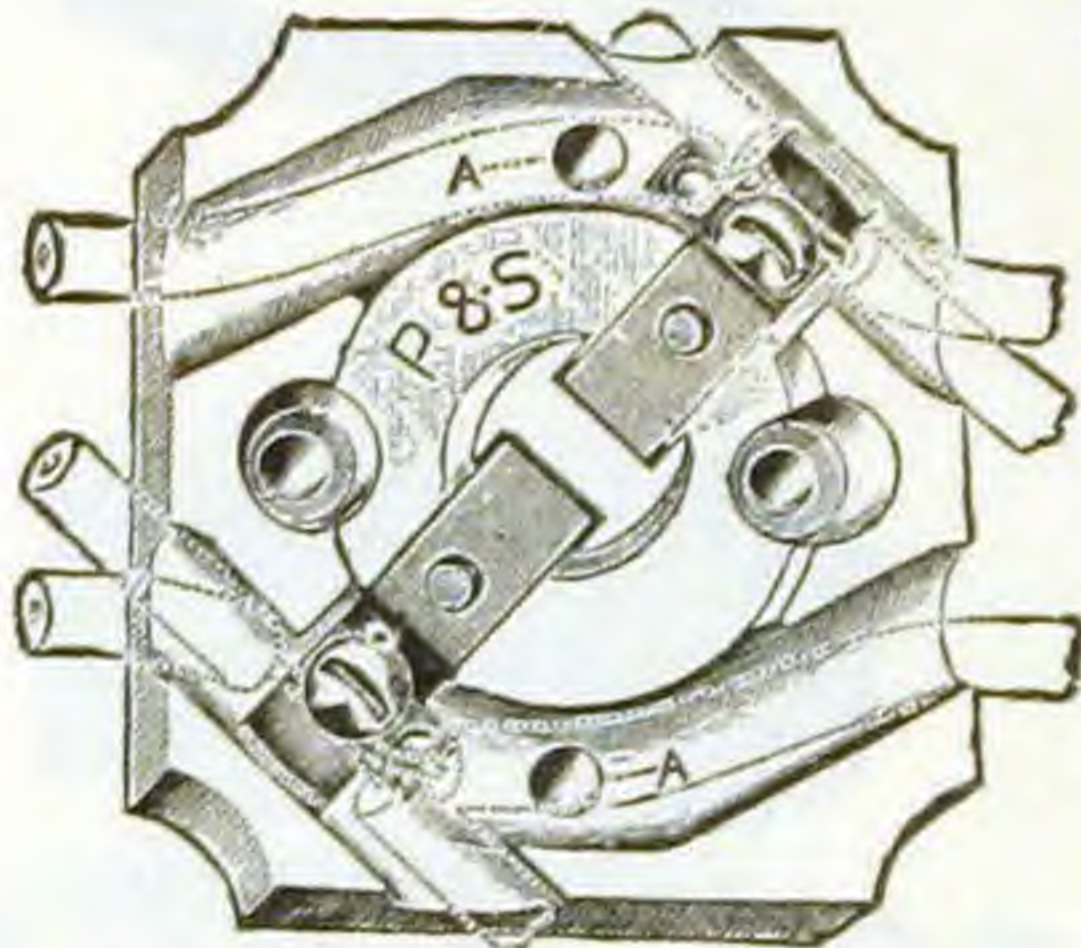
Cat. No. 60474.

60474	Fuseless Ceiling Rosette, for cleat work.....	.20
8215	Plain Fuseless Ceiling Button without back..per 100,	4.50





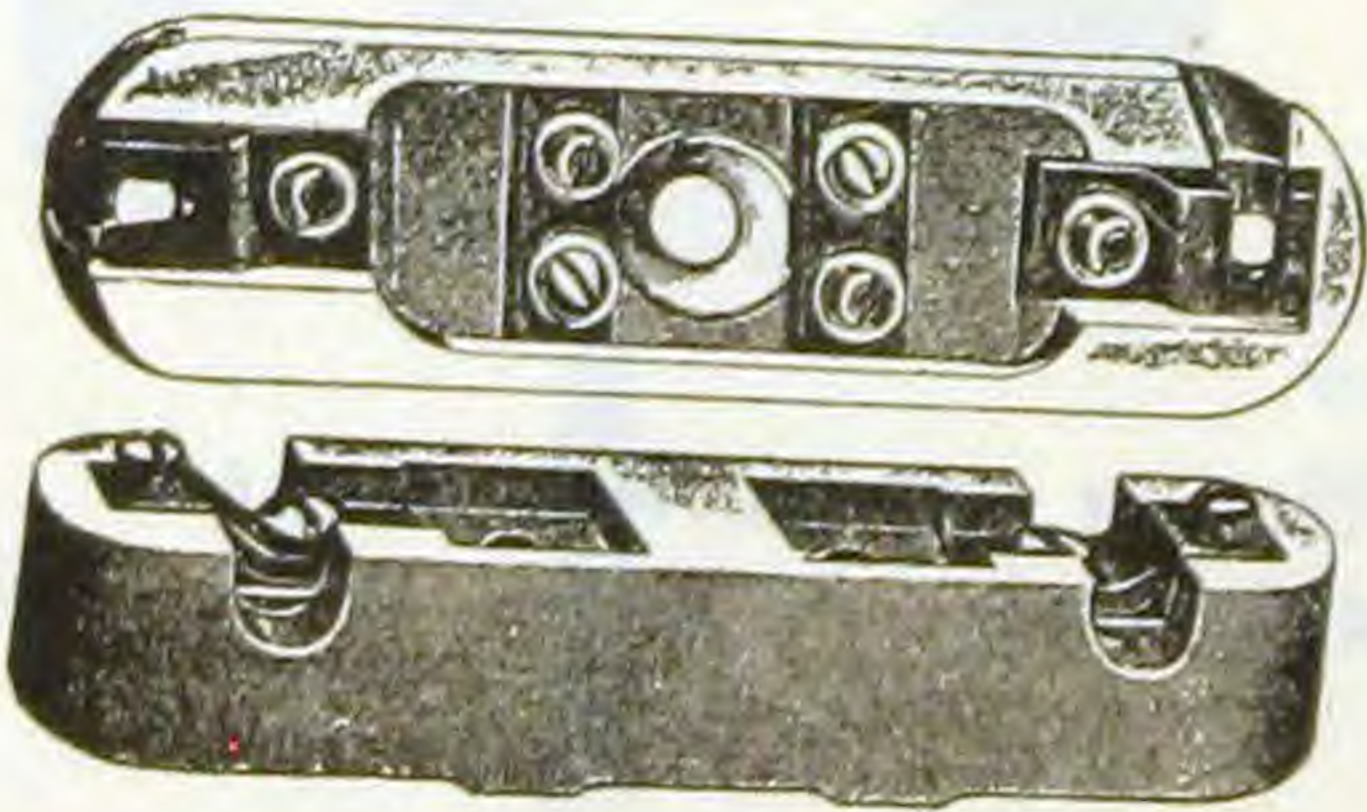
Cat. No. 10117.



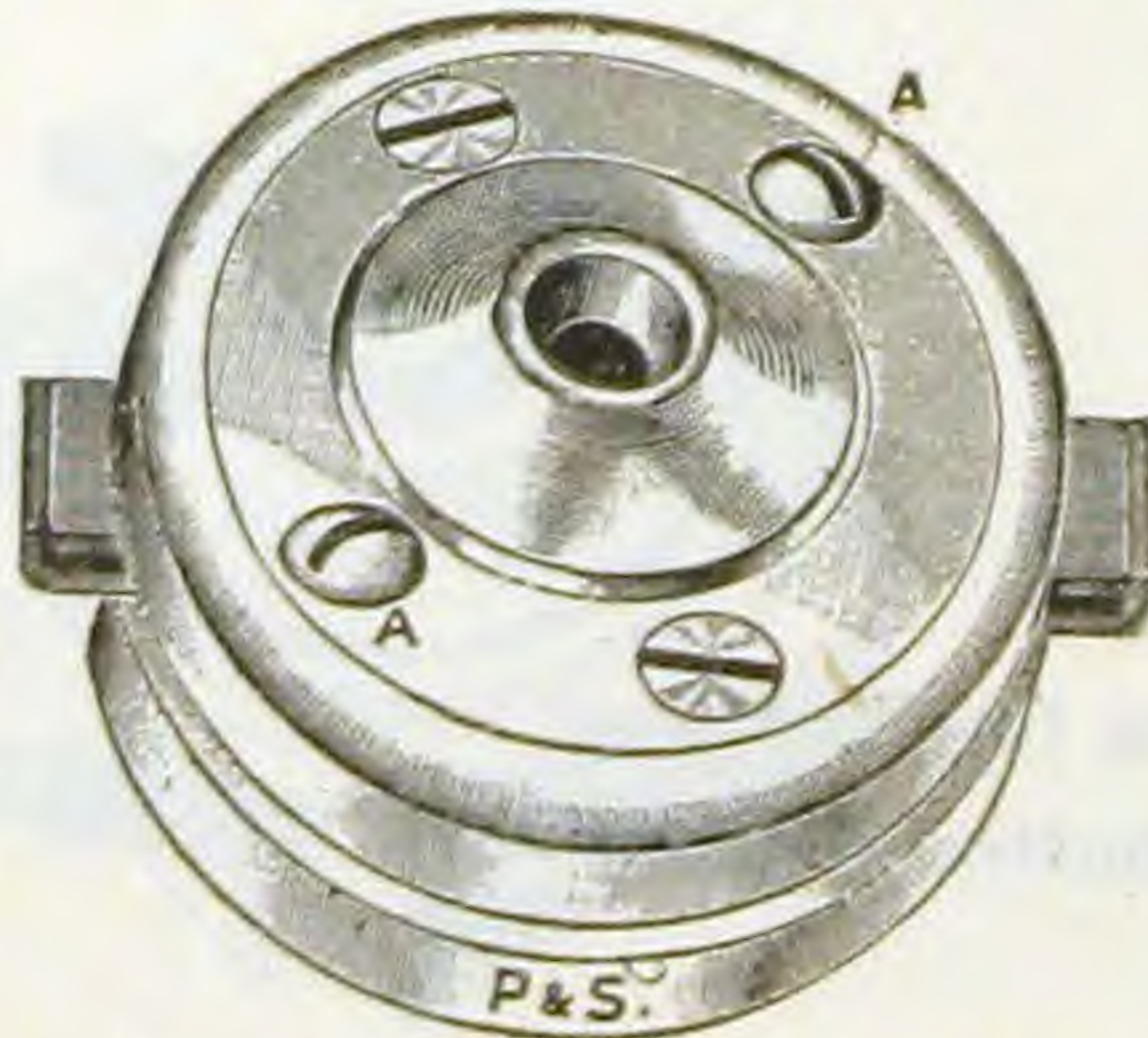
Cat. No. 10118.



Cat. No. 10119.



Cat. No. 10120.



Cat. No. 10121—Covered.

## Ceiling Cut-outs and Rosettes.

### Combination Rosette.

Cat. No.	Price.
10117 For moulding, concealed and 3 wire, each.	\$0.25

10118 For cleat, moulding, concealed and 3 wire, each.	.25
--	-----

### High Insulation Ceiling Button.

This Ceiling Button effectually keeps the wire away from the ceiling. It is small, being but 1½ inches in diameter.

10119 Ceiling Button per 100	5.00
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### Voorhees Fuse Rosette.

10120 Five amperes, each.	.20
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### Ceiling Rosette with Cap.

10121 Each.	.20
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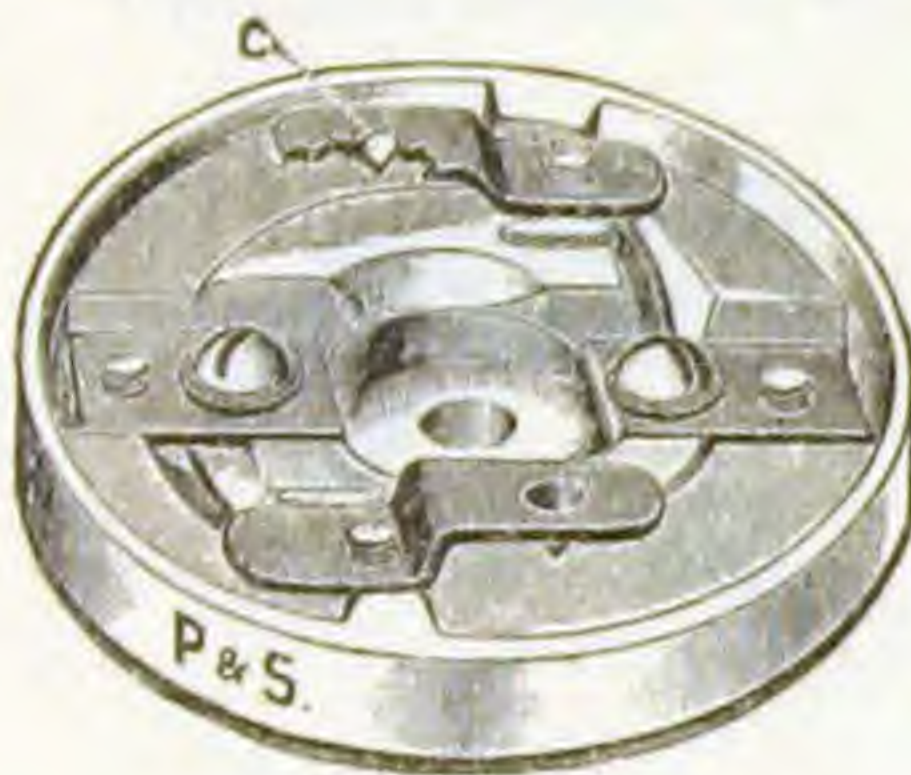
## Ceiling Cut-outs.



Cat. No. 10122.

### Plain Rosette, No Fuse.

Cat. No.	Price.
10122 Plain Rosette, each.....	\$0.15

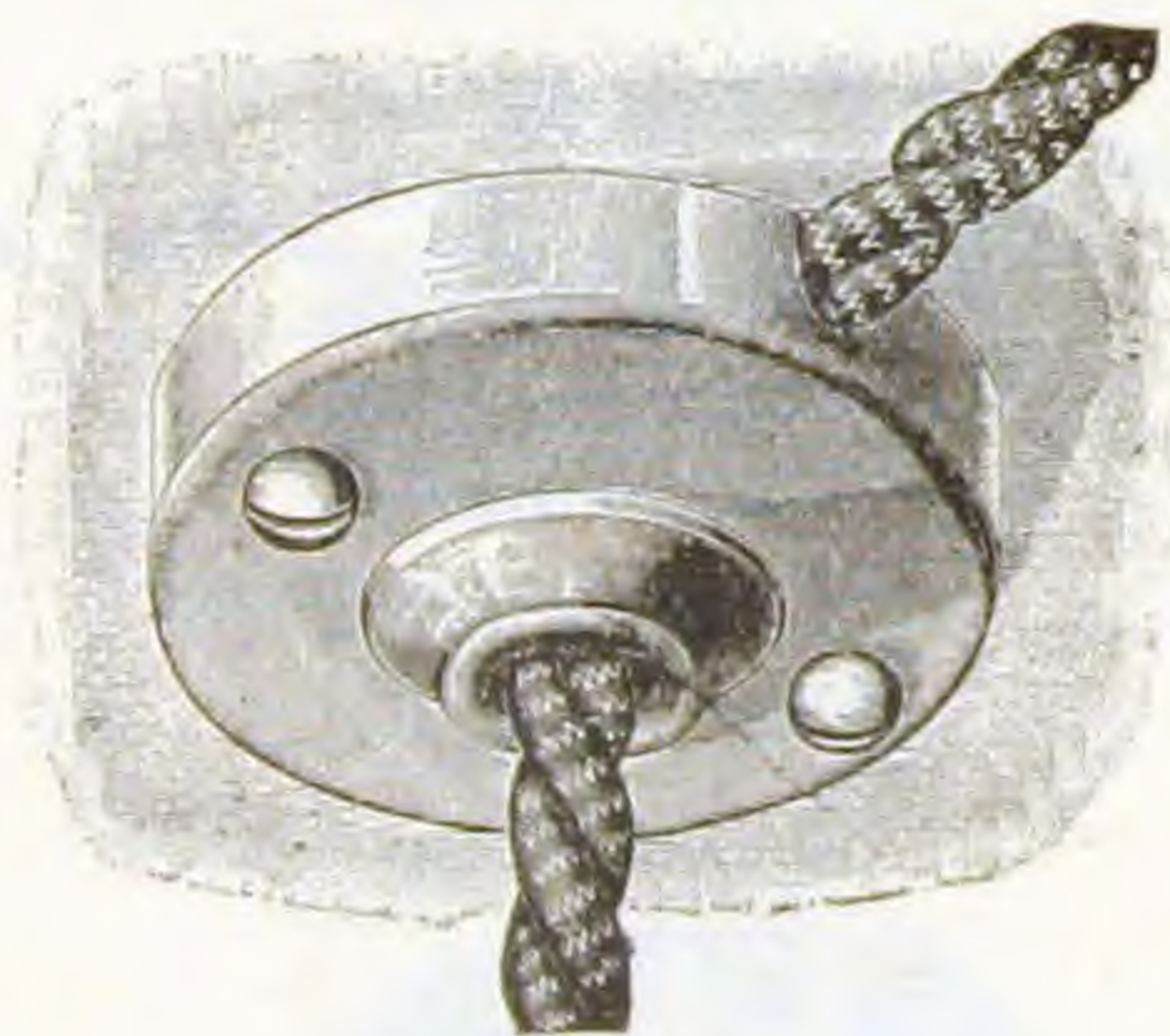


Cat. No. 10123—Open.

### Concealed Rosette.

This is an adaptation of No. 10121 Ceiling Rosette to concealed work. To remove cap, loosen the round head screws one or two turns.

10123 For concealed work, each.....	.20
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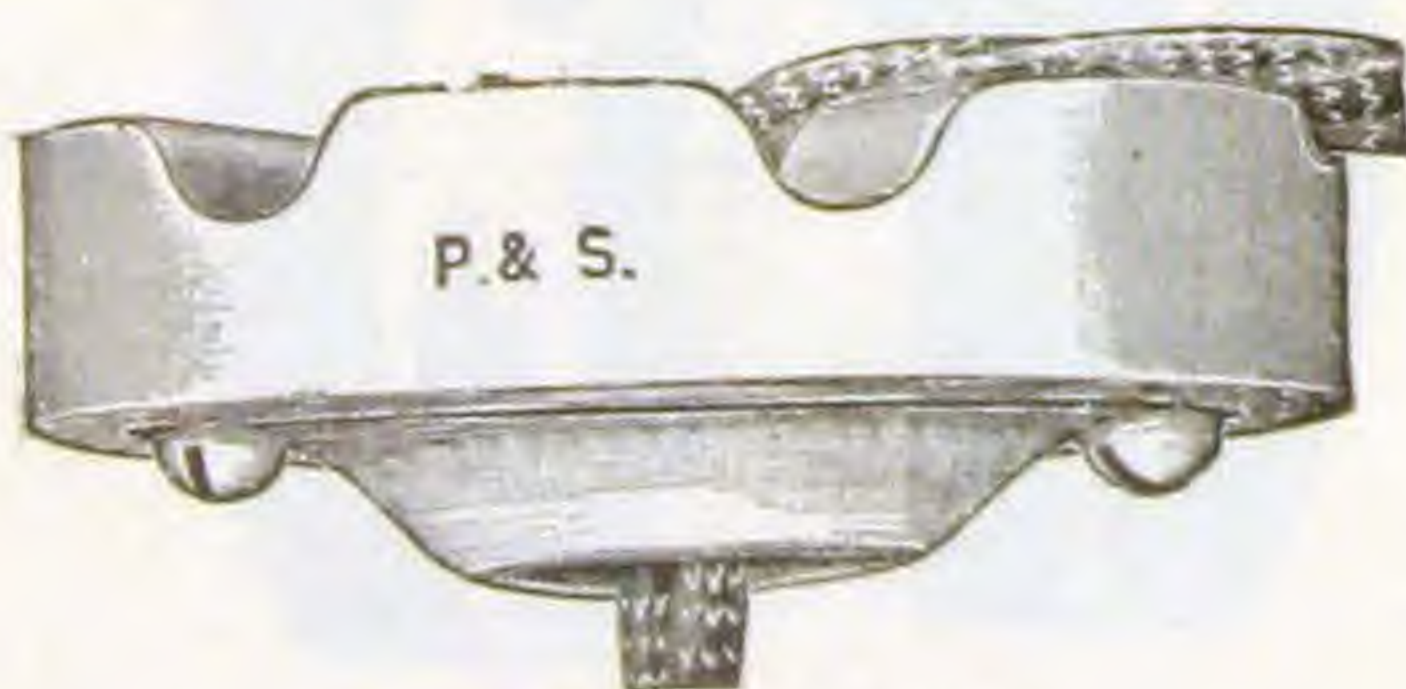


Cat. No. 10124.

### Porcelain Ceiling Button.

This Ceiling Button is used when it is desired to suspend the lamp at a distance from the rosette cut-out. No. 10124 is 1½ inches, and No. 10125 is 2¼ inches diameter.

10124 1½ inches in diameter, per 100.....	5.00
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Cat. No. 10125.

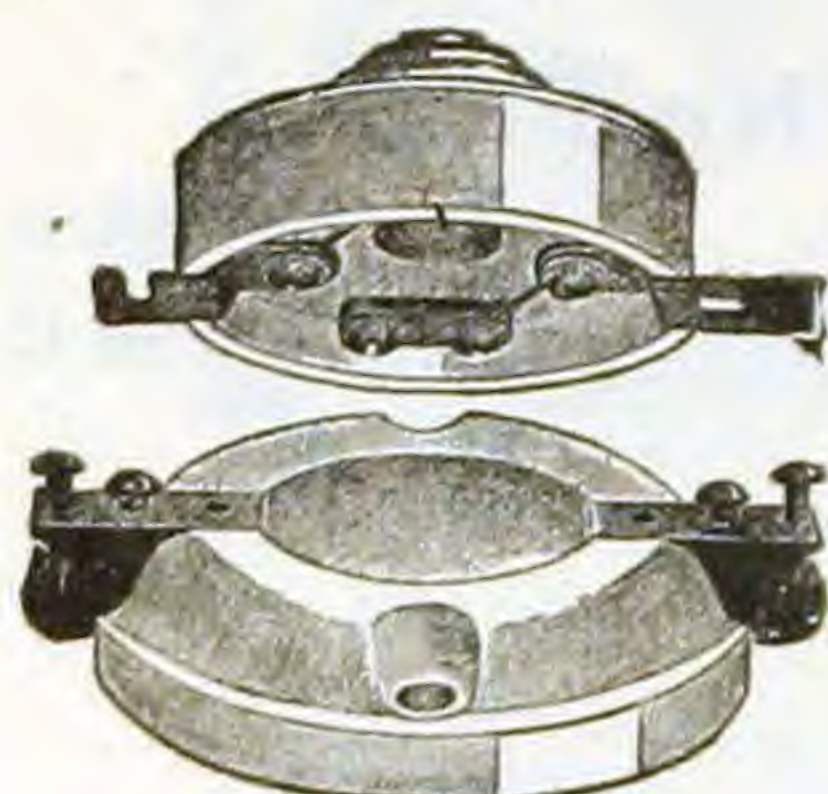
10125 2¼ inches in diameter, per 100.....	7.00
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## Ceiling Cut-outs.

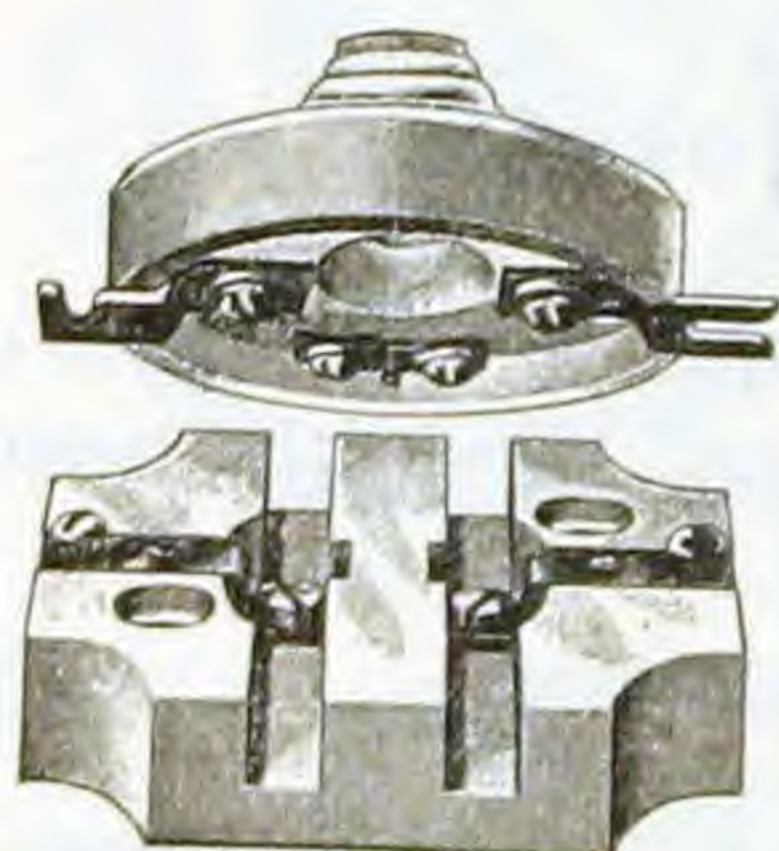
### K. W. Ceiling Rosette.

PACKED IN INDIVIDUAL BOXES.



Cat. No. 10126.

Cat. No.	Price.
10126 Cleat, each.....	\$0.20



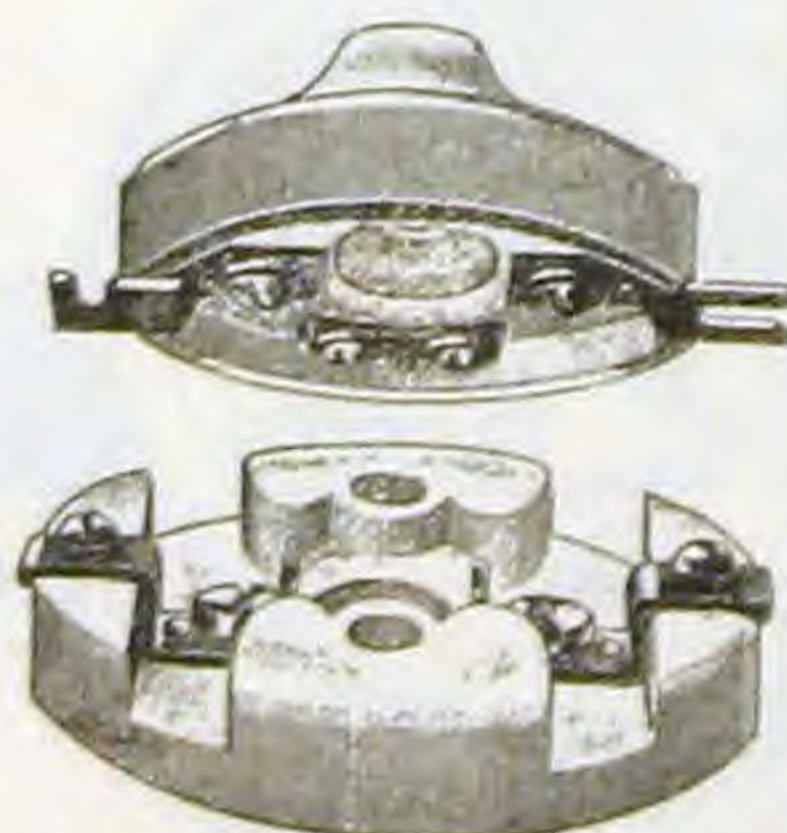
Cat. No. 10127.

10127 Square moulding, each.....	.20
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Cat. No. 10128.

10128 Concealed, each.....	.20
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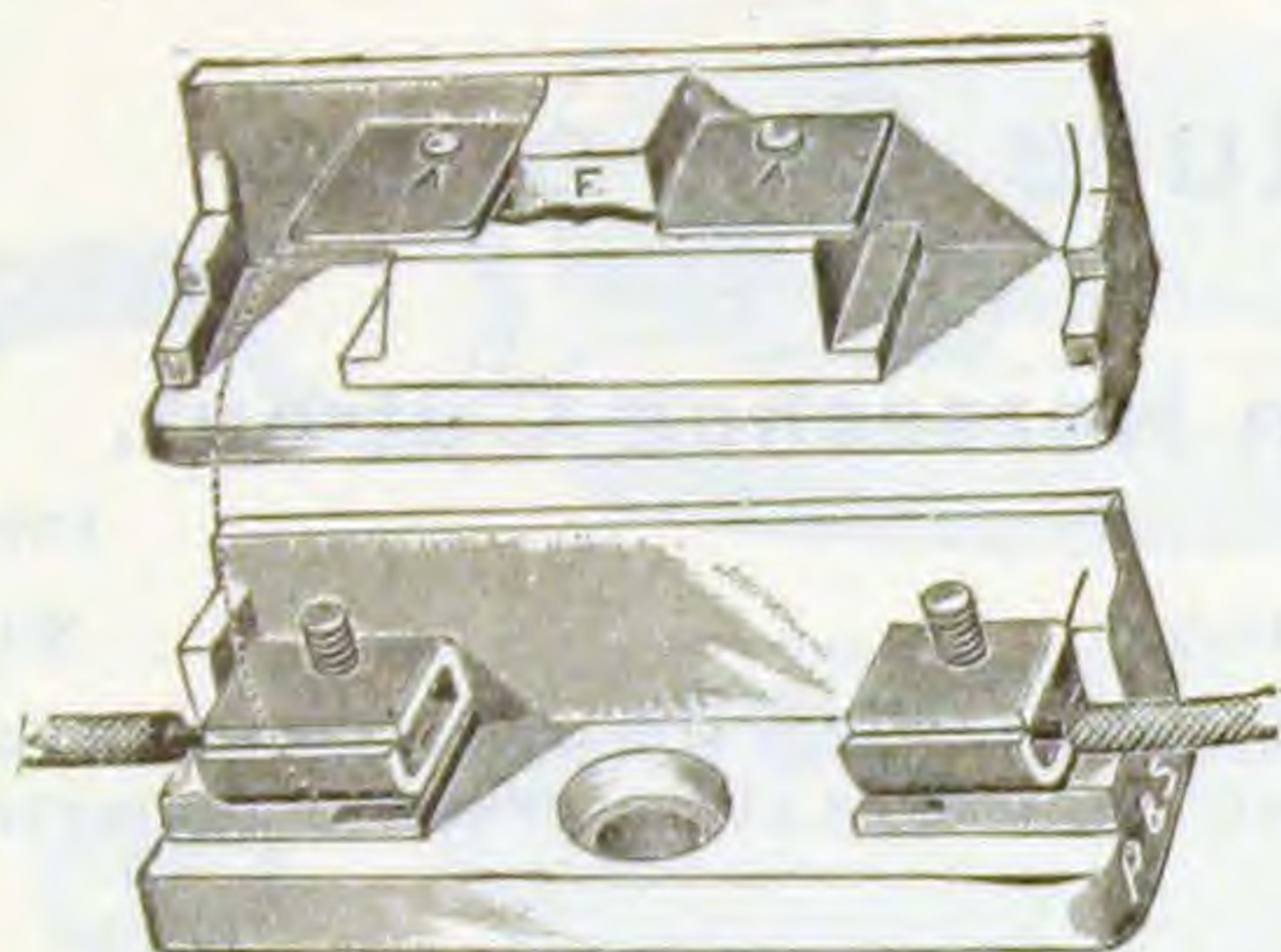


Cat. No. 10129.

10129 Combination, each.....	.20
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## Fixture Cut-outs.



Cat. No. 10130, Open.

This is similar to No. 10147, but is made straight instead of curved, and can be used wherever a Single-Pole Cut-out is desirable, or where wires are run over mouldings or cornices.

Cat. No.	Price.
10130 Covered Bug Cut-out, each.....	\$0.20

Use No. 10147 for fixtures using 5 amperes and under. For larger fixtures use No. 10130.



Cat. No. 10132.

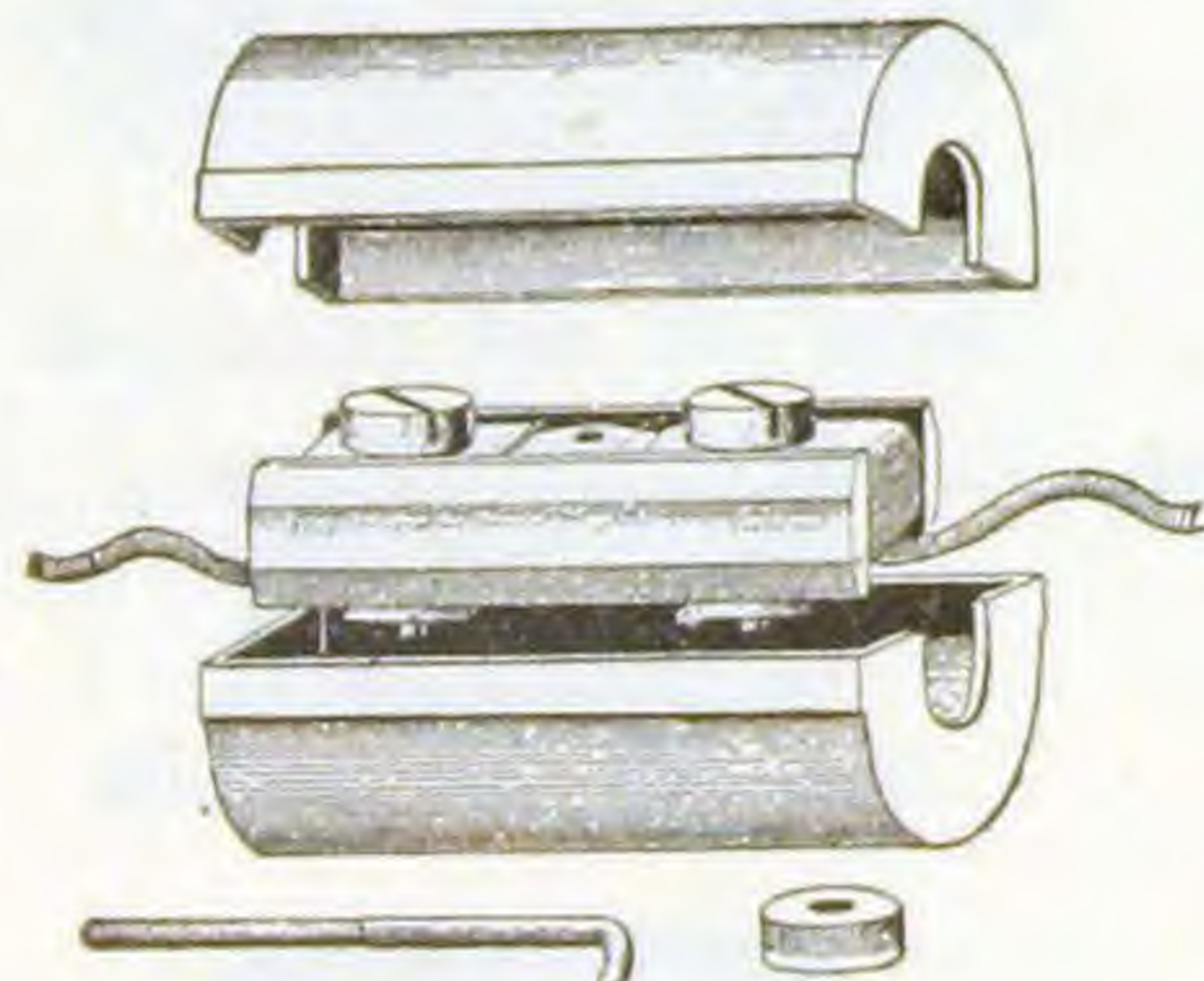
10131 Single-Pole Straight Bug Cut-out, capacity 5 amperes, each.....	.15
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10132 Single-Pole Curved Bug Cut-out, capacity 5 amperes, each.....	.15
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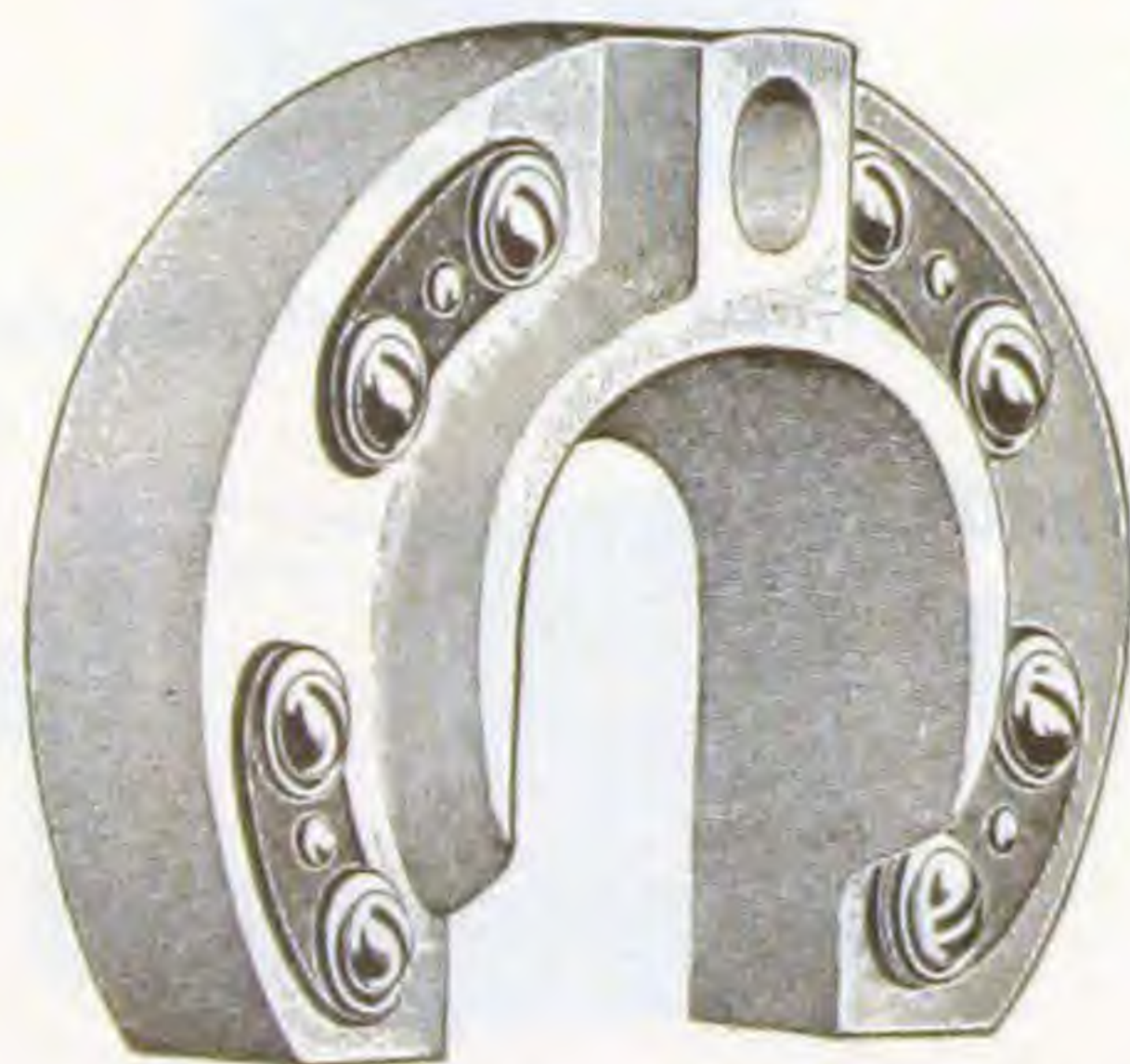
Cat. No. 10133.

10133 Single-Pole Electrolite Cut-out, 6 light, each.....	.15
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Cat. No. 10135.

10134 Newton Bug Cut out only, each.....	.10
10135 Newton Bug Cut-out complete, with cover, each.....	.20

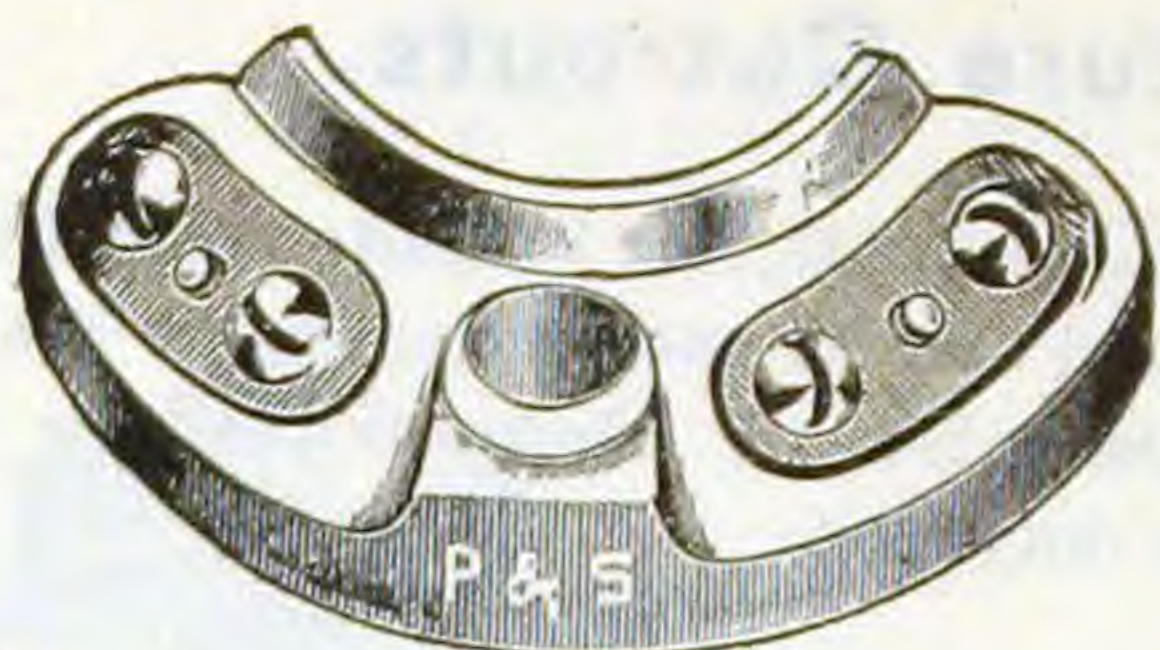


Cat. No. 10136.

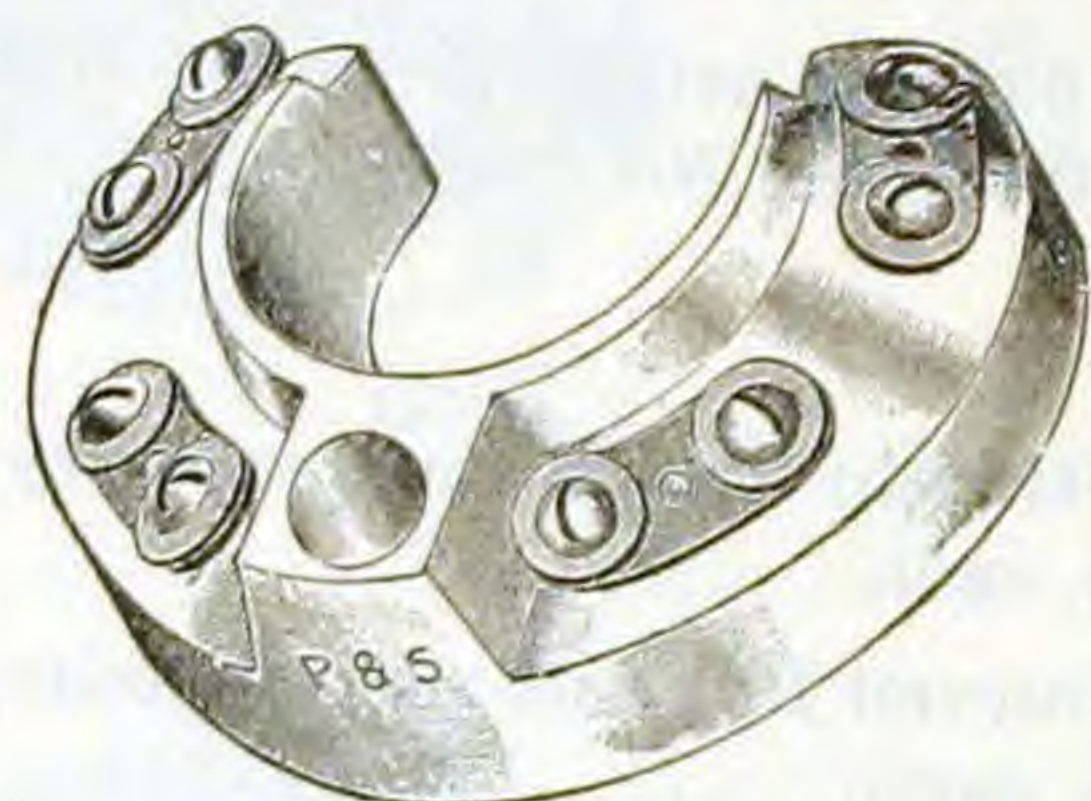
## Medium Horseshoe Cut-out.

10136 Each.....	.15
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Cat. No. 10137.



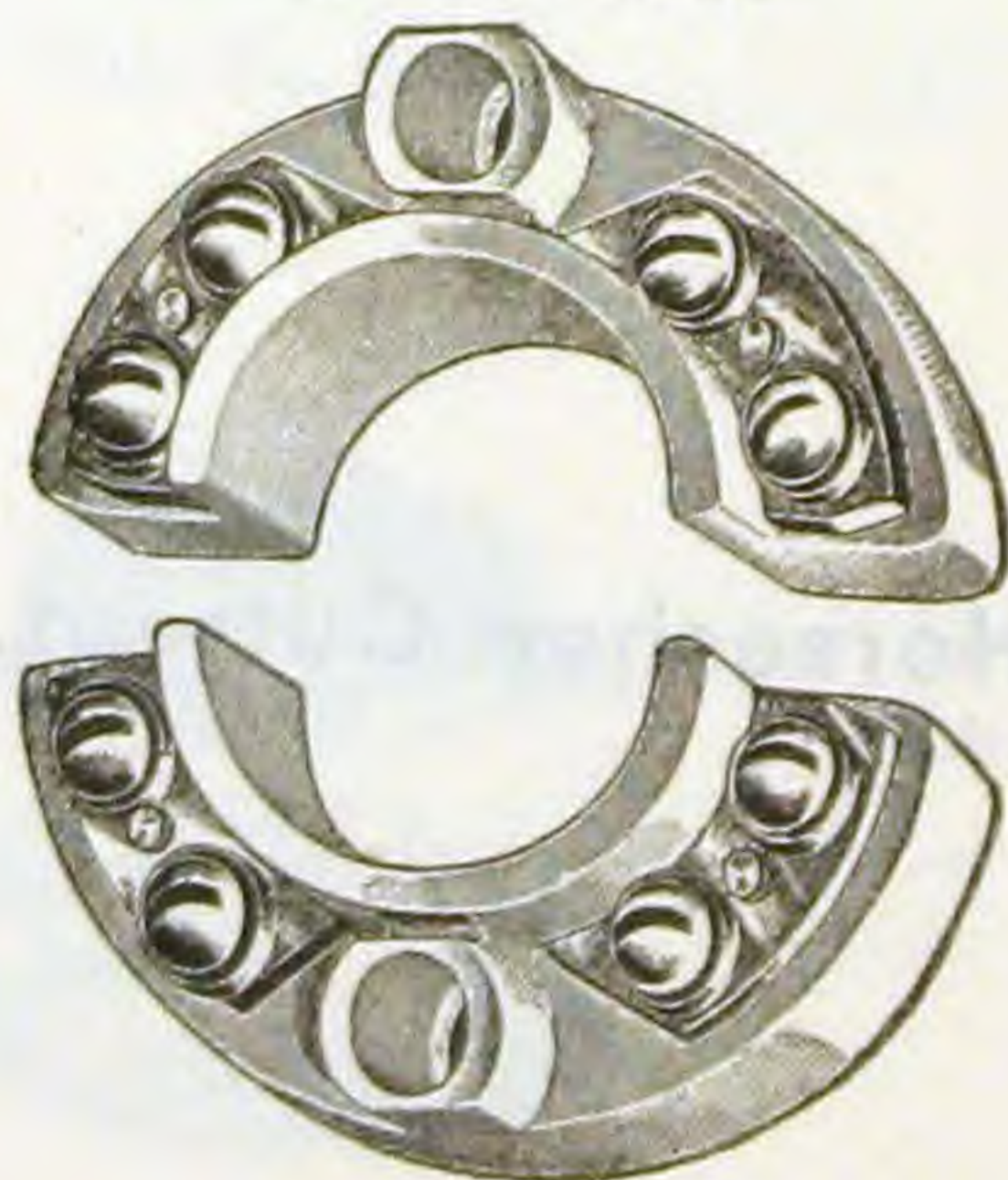
Cat. No. 10138.



Cat. No. 10139.



Cat. No. 10140.



Cat. No. 10141.

## Fixture Cut-outs.

### Medium Horseshoe Cut-out.

Cat. No.	Price.
10137 Bracket Cut-out .....	\$0.12
This is a very small double-pole Horseshoe Fixture Cut-out, measuring only $2\frac{1}{4}$ inches at its greatest diameter.	

10138 Horseshoe, each.....	.20
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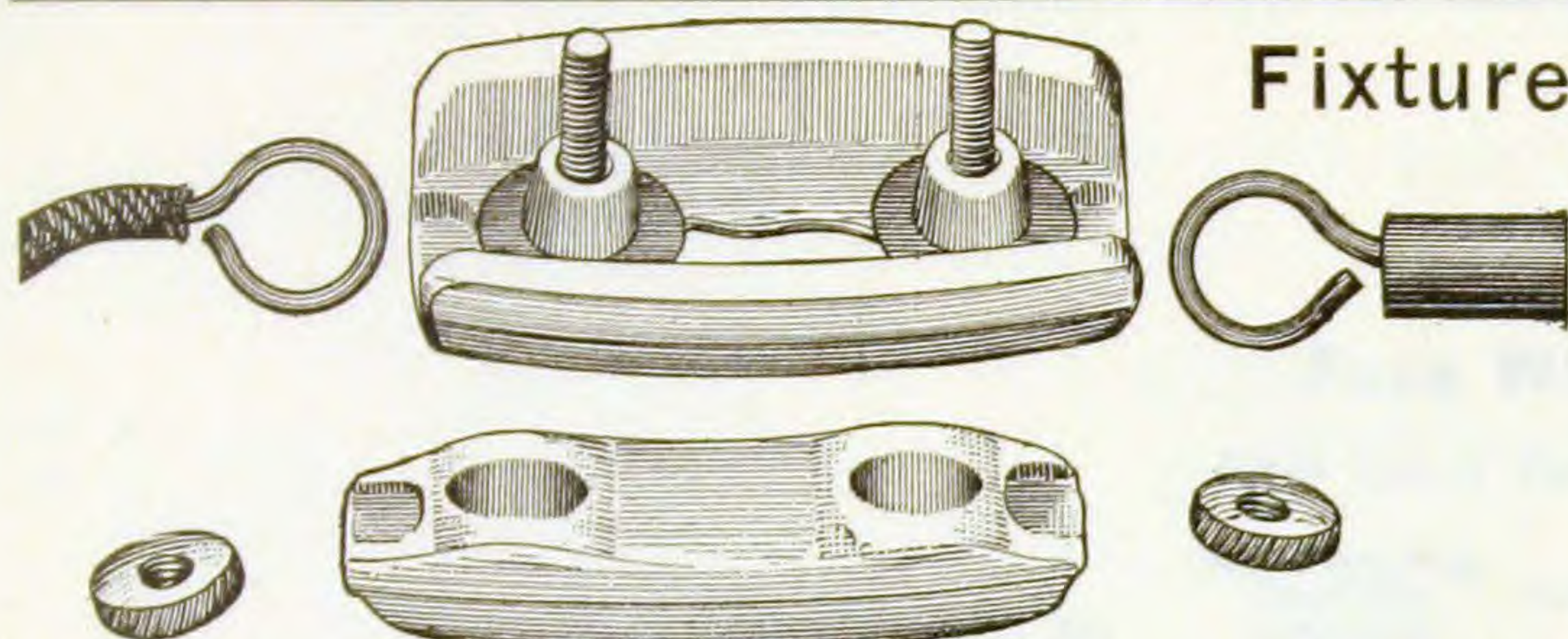
## Fixture Cut-outs.

10139 Horseshoe, each.....	.20
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10140 Horseshoe, each.....	.20
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10141 Horseshoe, per pair.....	.24
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## Fixture Cut-outs.

**Reynolds'**  
**"Self-Insu-**  
**lating"**  
**Cut-out.**

SMALL—SIMPLE—  
 SAFE.

Patented May 26, 1896.

No cover required. Insulation effected with the connection. It cannot "ground" the fixture. Quickly adjusted. Tape useless. Cheaper and smaller than any covered "Bug" on the market, and wholly different. Complies with underwriters' requirements.

Cat. No.	Price.
10142 Reynolds' Bug Cut out.....	.18



Actual size.—Cat. No. 10142.



Straight (long), Cat. No. 10143.

10143	Straight (long), each.....	.25
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Quadrant, Cat. No. 10144.

10144	Quadrant, each.....	.15
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Midget, Cat. No. 10145.

10145	Midget, each.....	.15
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Midget, D. P., Cat. No. 10146.

10146	Midget, double-pole, each.....	.25
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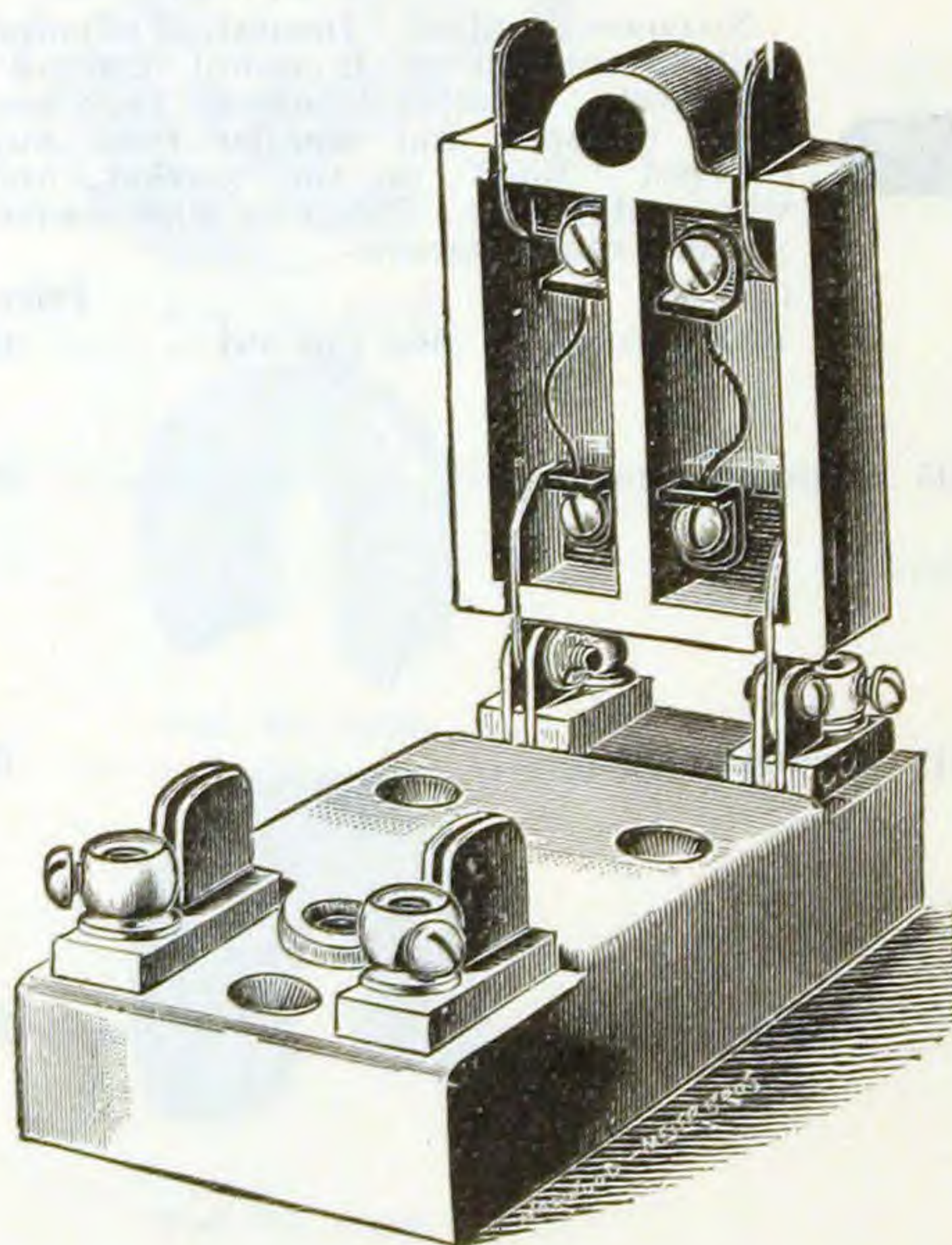


Cat. No. 10147.

This is a Fixture Cut-out with a cover which can be removed to renew fuse. It is small enough for smallest canopy.

10147	Covered Bug Cut-out, each.....	.20
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Cat. No. 10148.

### Combination Cut-out.

This cut illustrates our Combination Cut-out and Switch. As the illustration shows, it is a double-pole main block with a cover hinged on one end. Fuses are placed in the cover and can be easily replaced. Circuit is always broken when cover is open. Designed especially for entrance switch, and answers the double purpose of fuse block and switch. It is designed to be operated with a cord, which is fastened in the hole at the lower end of the cover, passing through a hole in the base between the two contact terminals, then running along the channel in the back of the base and hangs down from the ceiling within easy reach of the hand; or, if desired, may be operated with a hook fixed on the end of a pole.

Cat. No.	Price.
10148 15 Ampere.....	\$2.50



## Fuse Wire.

## Price List of Fuse Wire.



Cat. No. 10161.

Cat. No.	Safe Carrying Capacity, Amperes.	Price per Lb.	Price per Foot.
10149	$\frac{1}{4}$	....	$\frac{1}{2}c$
10150	$\frac{1}{2}$	\$3.20	$\frac{1}{2}$
10151	$\frac{3}{4}$	2.00	$\frac{1}{2}$
10152	1	.80	$\frac{1}{2}$
10153	2	.80	$\frac{3}{4}$
10154	3	.80	1
10155	4	.75	1
10156	5	.75	$1\frac{1}{8}$
10157	6	.75	$1\frac{1}{2}$
10158	7	.75	$1\frac{1}{2}$
10159	8	.70	$1\frac{3}{4}$
10160	9	.70	$1\frac{3}{4}$
10161	10	.70	$1\frac{3}{4}$
10162	12	.70	2
10163	14	.70	2
10164	15	.70	$2\frac{1}{2}$
10165	16	.70	$2\frac{1}{2}$
10166	18	.70	3
10167	20	.70	3
10168	25	.70	4
10169	30	.70	5
10170	35	.60	5
10171	40	.60	6
10172	45	.60	7
10173	50	.60	8
10174	60	.50	8
10175	70	.50	9
10176	75	.50	9
10177	80	.50	10
10178	90	.50	10
10179	100	.50	12
10180	125	.50	15
10181	150	.50	20
10182	175	.50	25
10183	200	.50	30



### Fuses for Ceiling Rosettes and Branch Blocks.

Cat. No.	Price.
10184 1 to 10 Amperes....	..\$0.08



Cat. No. 10184.



Cat. No. 10185.



Cat. No. 10186.



Cat. No. 10187.



Cat. No. 10189.

10185 1 to 10 Amperes.....	.10
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10186 1 to 25 Amperes.....	.12
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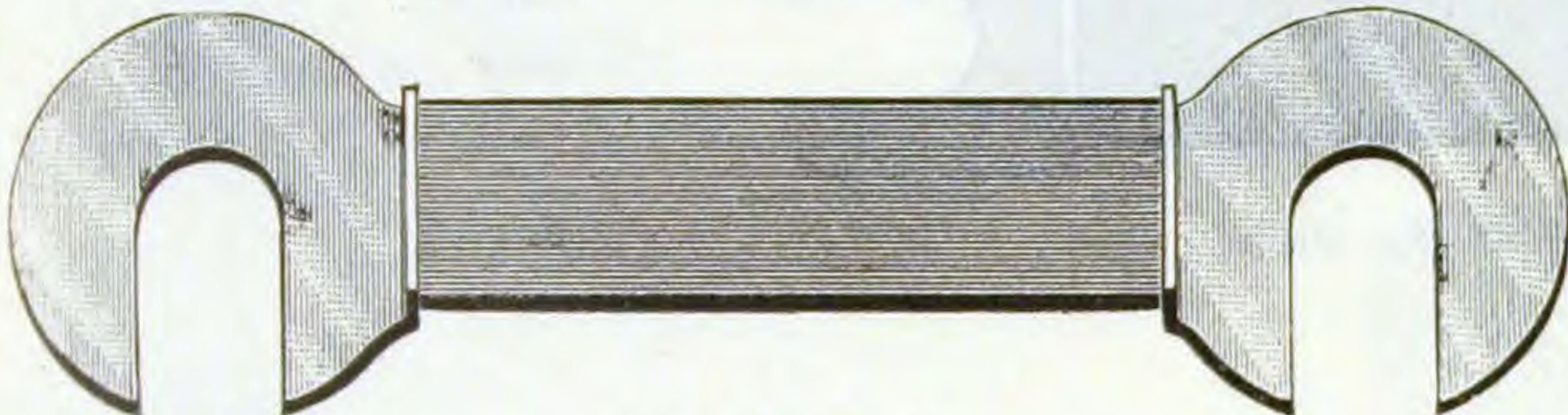
10187 1 to 50 Amperes.....	.15
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10189 1 to 100 Amperes.....	.18
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10190 1 to 150 " .....	.21
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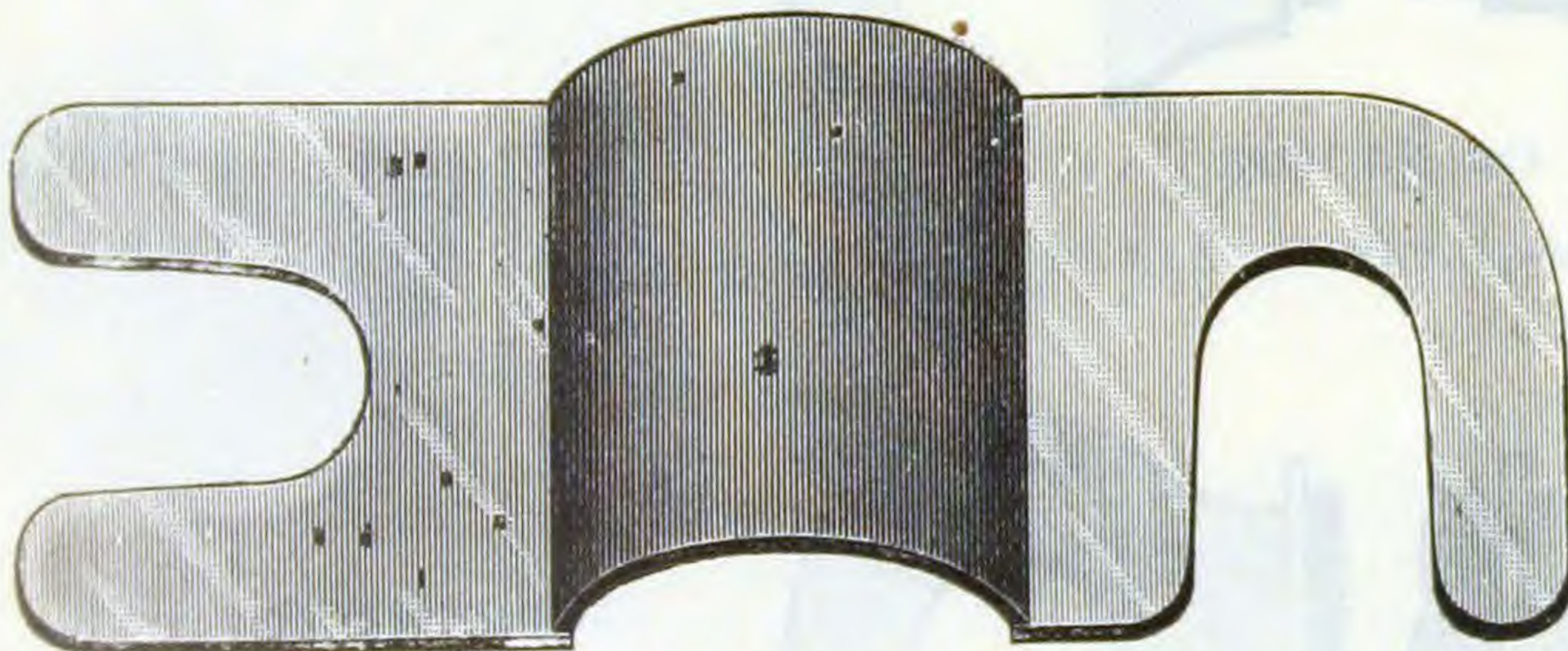


**Tested Fuse Links for Main Line Blocks and  
Switch Board Use.**



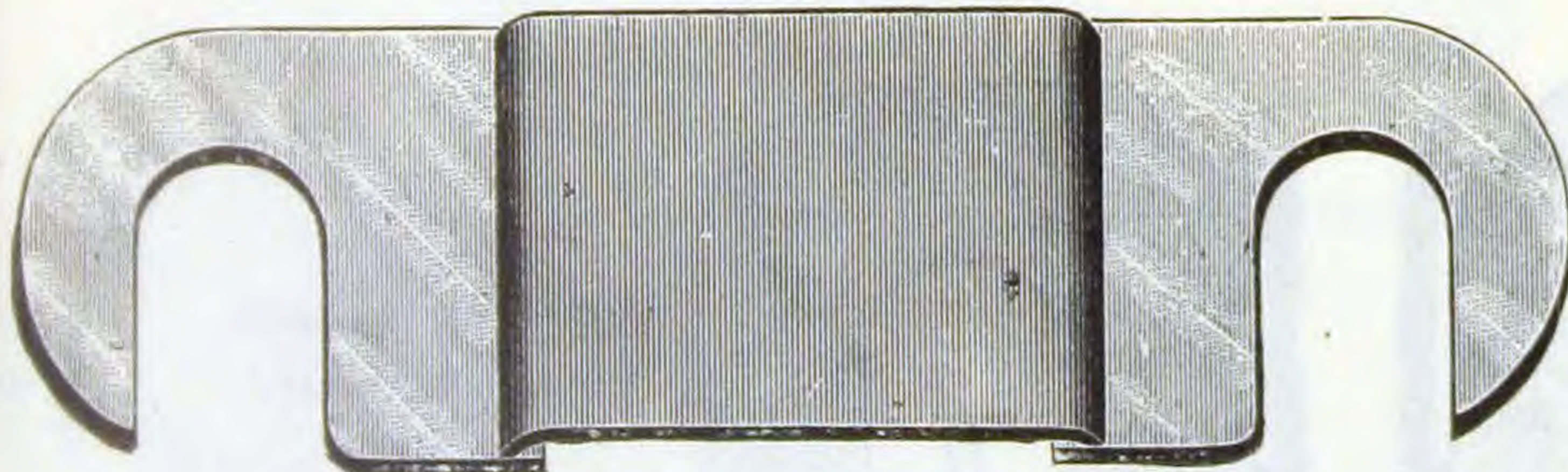
Cat. No. 10191.

Cat. No.	Price.
10191 25 to 50 Amperes.....	\$0.15



Cat. No. 10192.

10192 25 to 100 Amperes.....	.18
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Cat. No. 10193.

10193 25 to 300 Amperes.....	.21
10194 25 to 375 Amperes.....	.24
10195 25 to 600 Amperes.....	.28



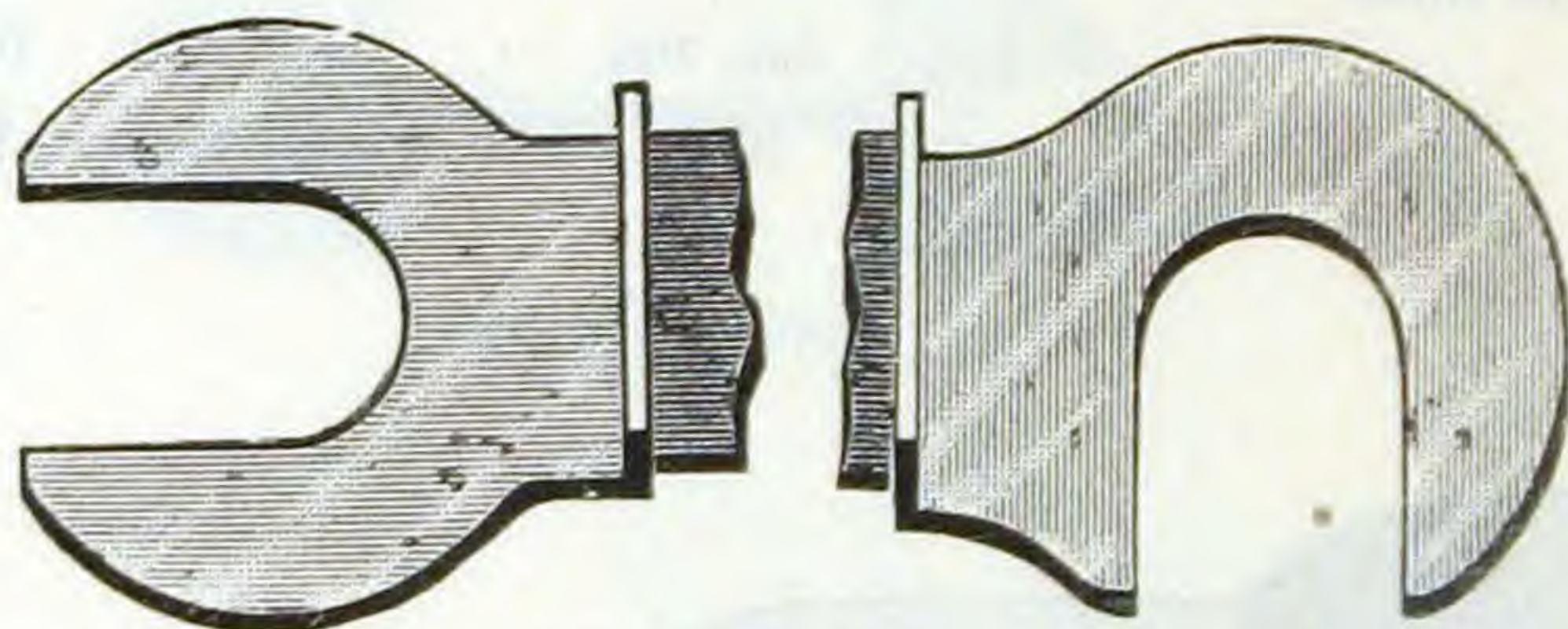
**Special Fuse Links.**

In ordering give *Ter. No.* and distance from *Center to Center* of binding screws.

Cat. No.	Price.
10196 50 Amperes.....	\$0.15

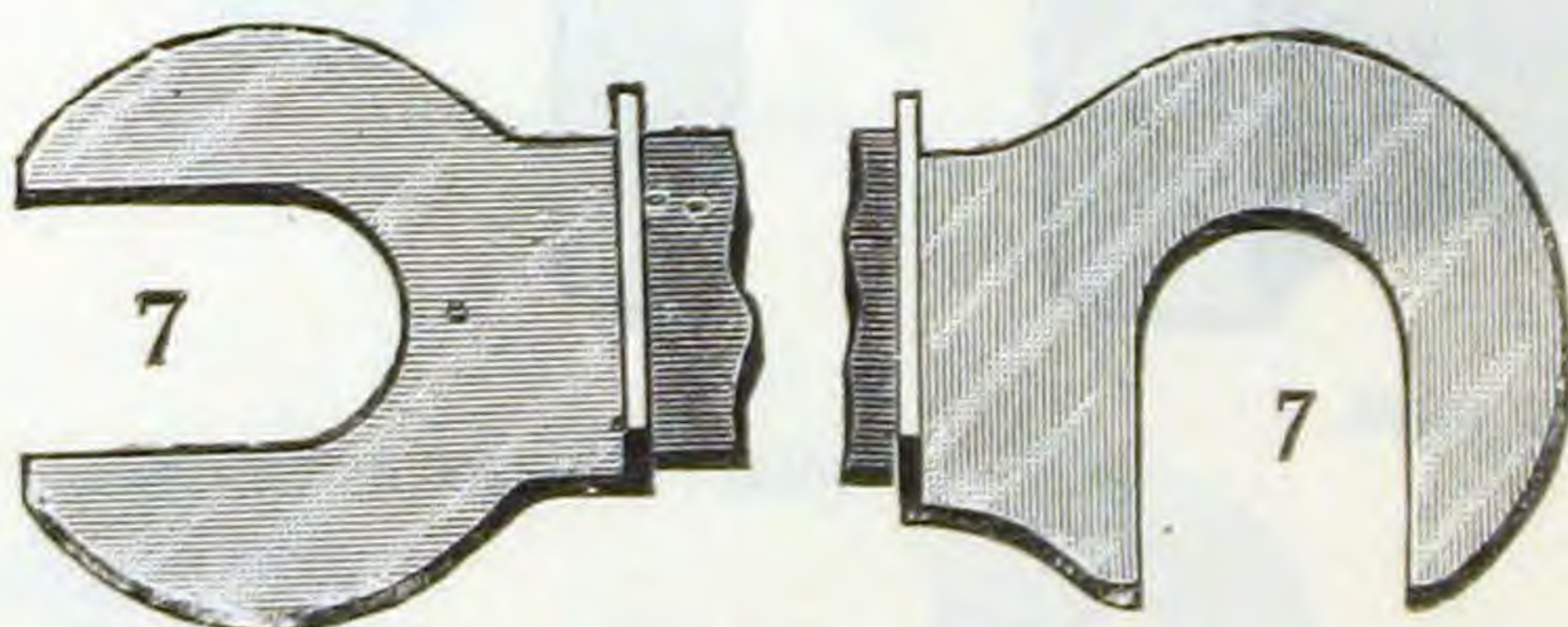


Cat. No. 10196.



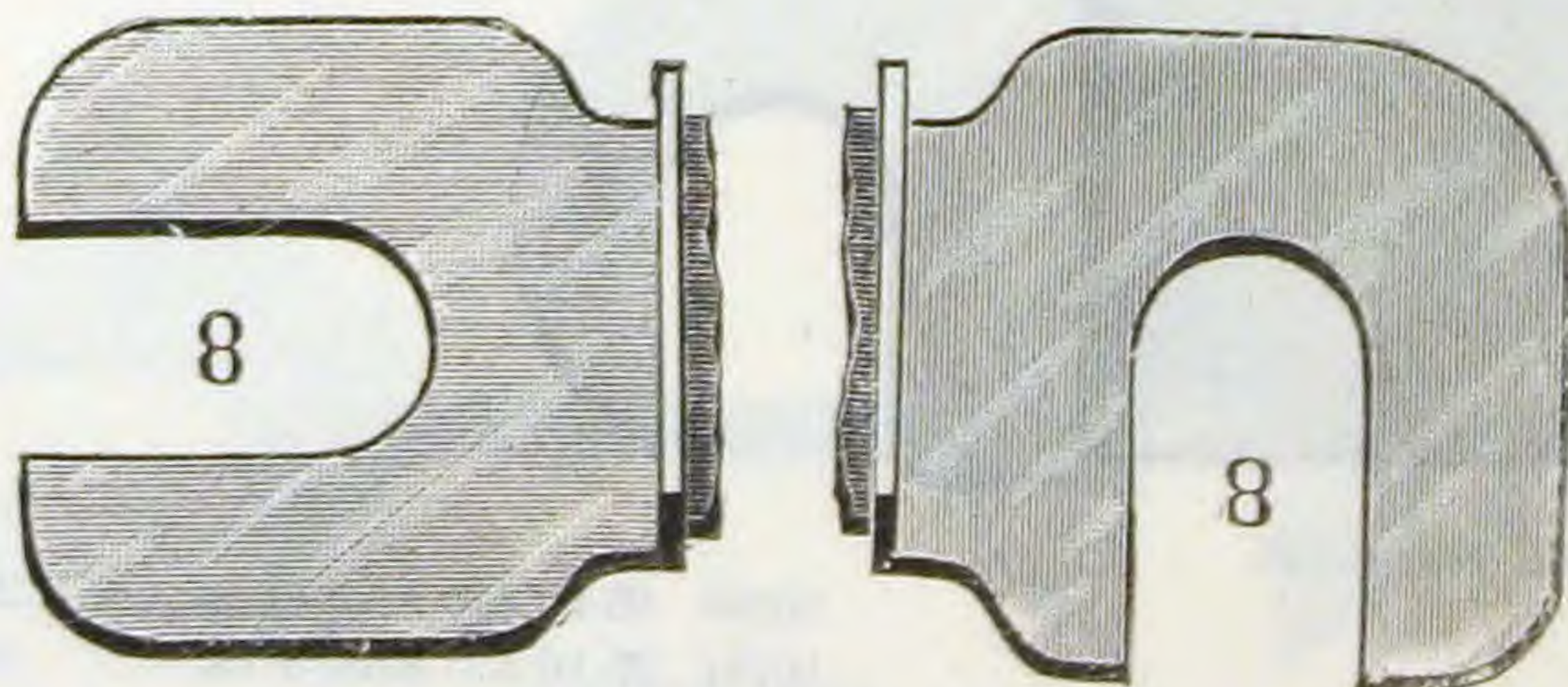
Cat. No. 10197.

10197 75 Amperes.....	.20
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Cat. No. 10199.

10198 100 Amperes.....	.25
10199 200 Amperes.....	.30



Cat. No. 10201.

10200 400 Amperes.....	.40
10201 600 Amperes.....	.50

Larger sizes, special price\*  
quoted upon application.



## Switches.

### Snap Switches on Porcelain Bases.

These switches are for circuits of not over 125 volts.

Cat. No.	Price.
67420 Single-pole Ratchet Switch, capacity 5 amp., polished..	\$0.40
5629 " " " " " 5 " nickeled..	.40

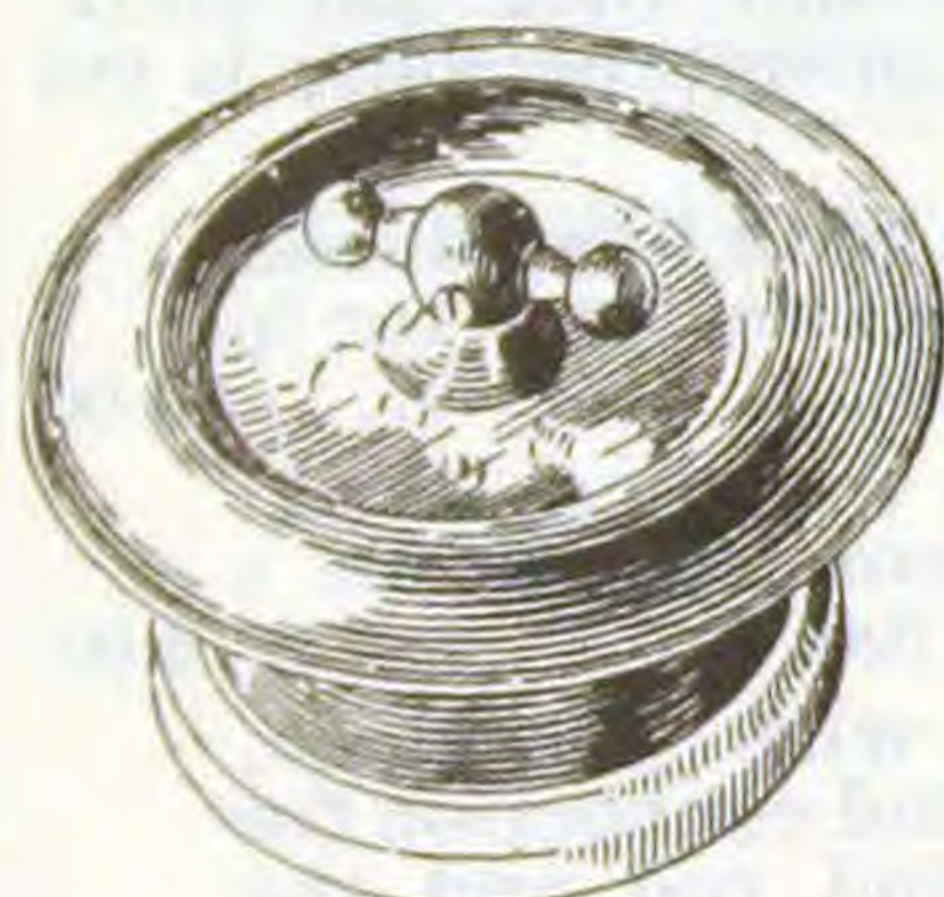


5629



5625

5626 Single-Pole Ratchet Switch, capacity 10 amp., polished..	.60
5625 " " " " " 10 " nickeled..	.60



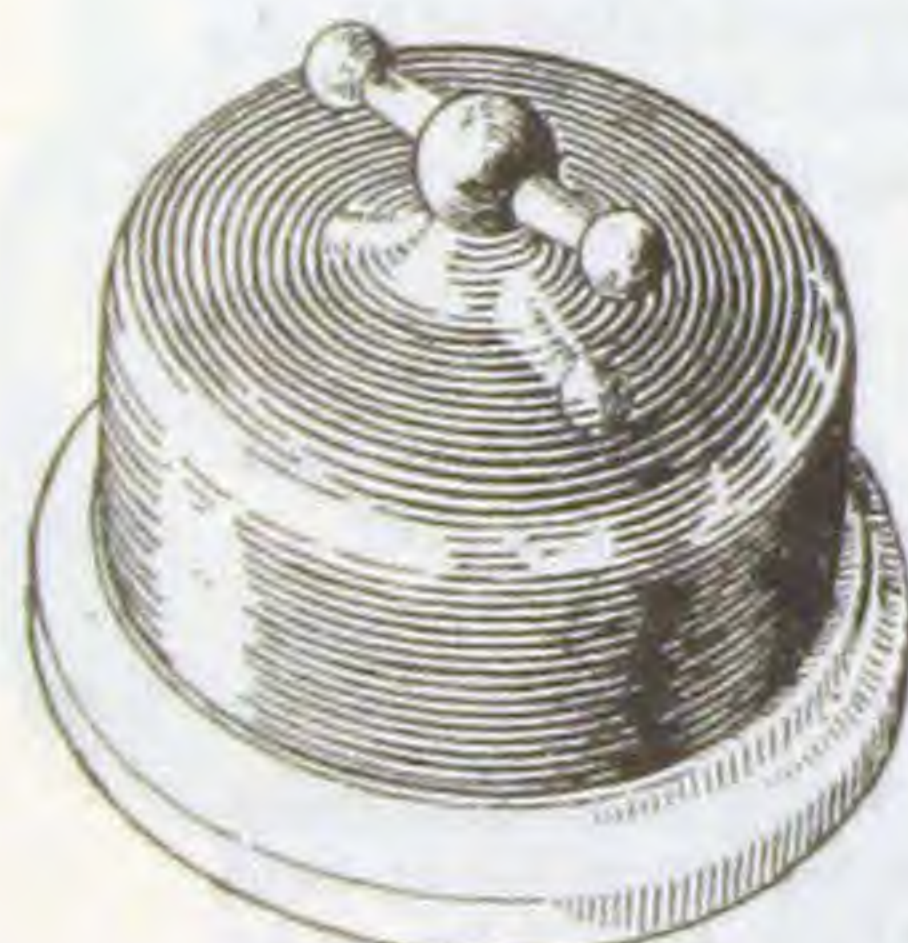
57568

57568 Double-Pole Flush Pocket Switch, capacity 10 amperes,	
nickeled .....	1.25



65097

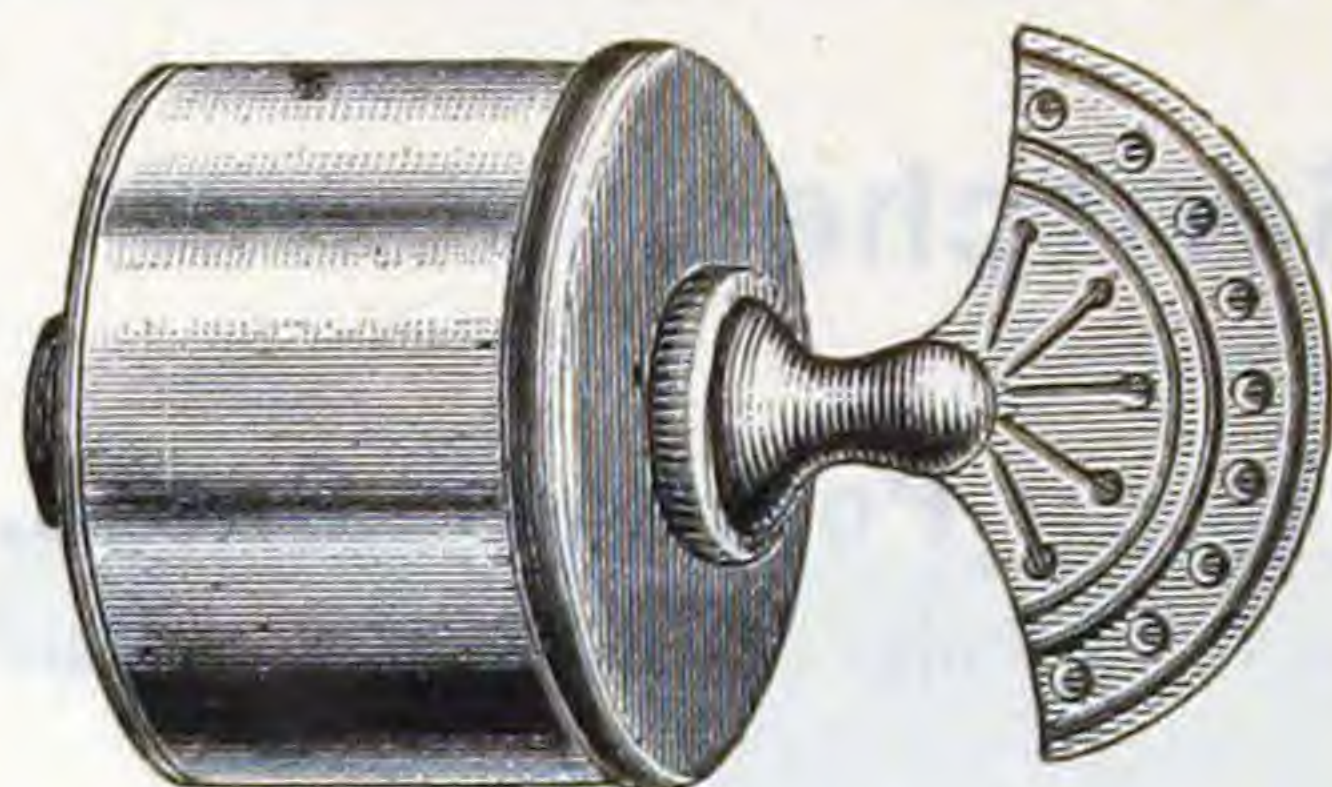
65097 Double-Pole Ratchet Switch for interior conduit, 10 amp.,	.85
65098 Three-way Switch, capacity 2 amp., polished .....	1.00
65099 " " " " 2 " nickeled .....	1.00
65103 " " " " 2 " for interior conduit,	1.00
65104 " " Flush Pocket Switch, cap. 2 amp., nickeled...	1.50



65102

65095 Double-Pole Ratchet Switch, capacity 10 amp., polished..	.85
65096 " " " " " 10 " nickeled..	.85
65100 " " " " " 25 " polished..	1.40
65102 " " " " " 25 " nickeled..	1.40
65120 " " " " " 50 " polished..	1.85
65122 " " " " " 50 " nickeled..	1.85





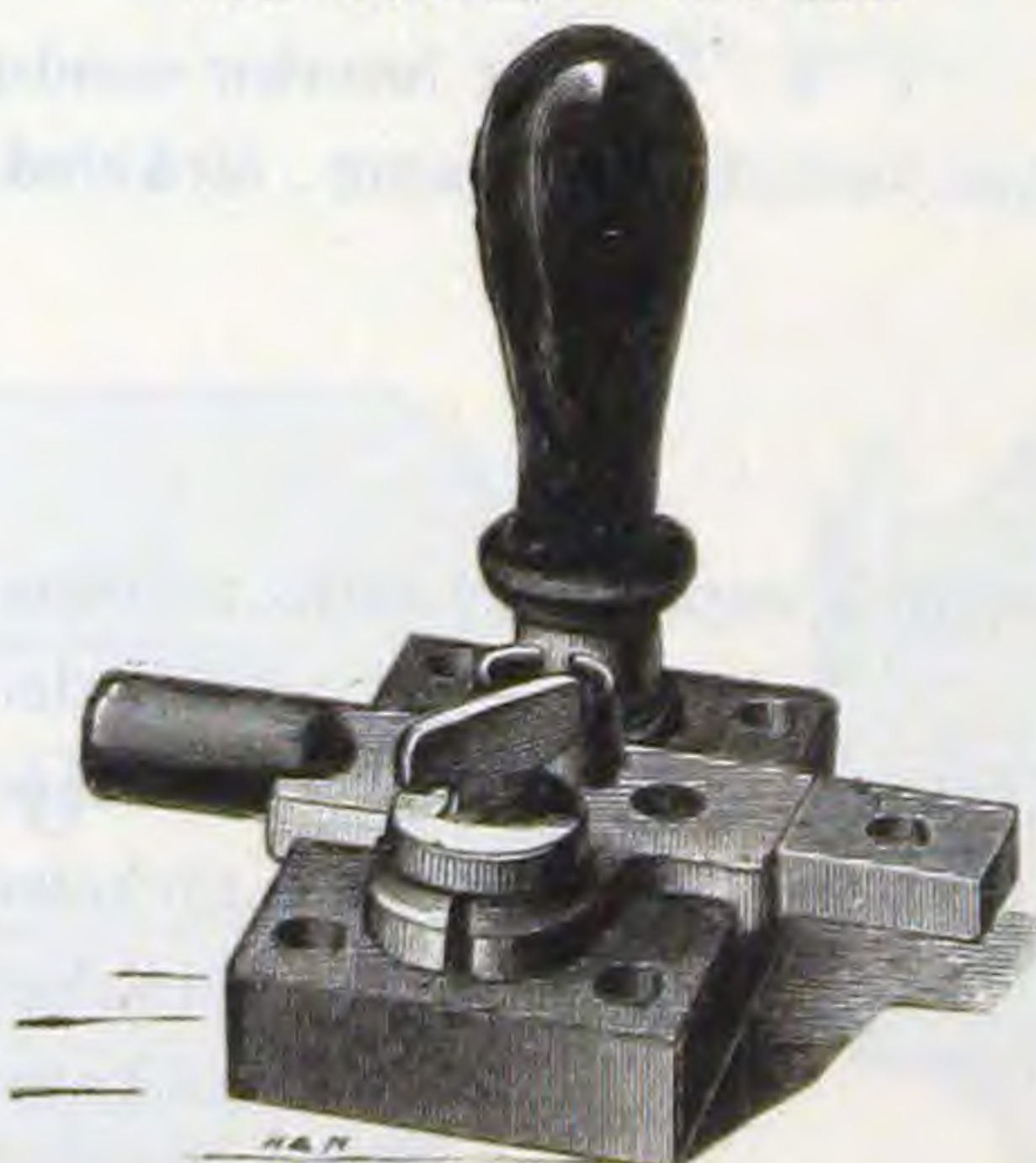
Cat. No. 65067.



Cat. No. 60207.



Cat. Nos. 65047 to 65051.



Cat. Nos. 65061 to 65065.

## Edison Miscellaneous Switches.

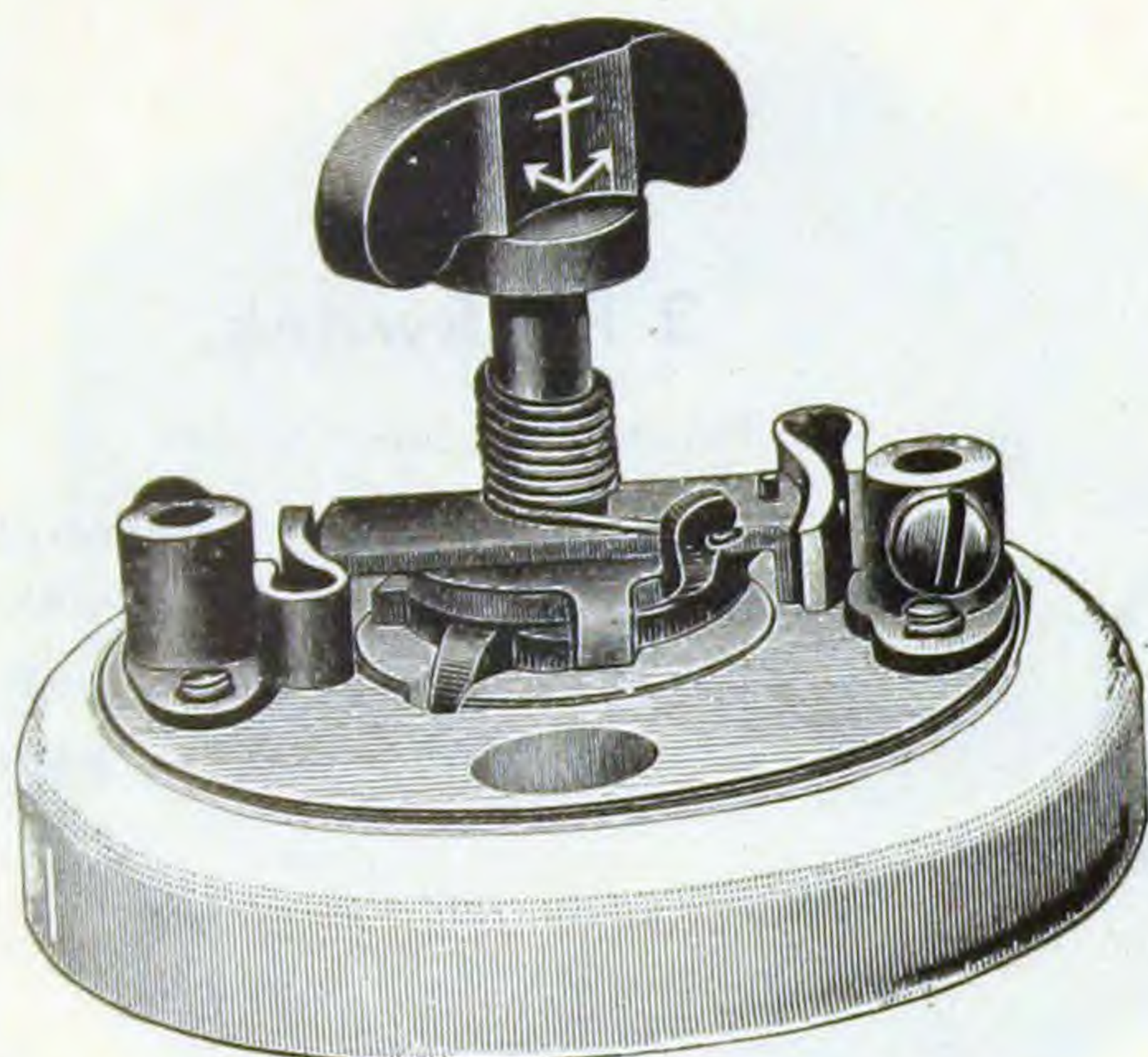
Cat. No.	Price.
65067 Single-Pole Electrolier for turning on or off lights consecutively, 10 amp., plain...	\$3.15
65069 Single-Pole Electrolier for turning on or off lights consecutively, 10 amp., polished.	3.60
60207 Push Button Switch for flexible cord, 1 lt., polished.....	.90
9164 Push Button Switch for flexible cord, 10 lt., polished....	1.20

## Plug Switches on Incombustible Bases.

These Switches are for use on circuits whose potential is not over 250 volts. Their maximum current capacity is 250 amperes.

65047 Plug Switch with Fuse Block, with end connections for $\frac{1}{2}$ in. round rod.....	\$4.00
65049 Plug Switch with Fuse Block, with end connections for 1 in. x $\frac{1}{4}$ in. flat bar.....	4.00
65051 Plug Switch with Fuse Block, with one end connection for $\frac{1}{2}$ in. round rod and the other for 1 in. x $\frac{1}{4}$ in. flat bar.	4.00
65053 Plug Switch with Fuse Blocks and additional plug for bridging around fuse, with end connections for $\frac{1}{2}$ in. round rod.....	4.75
65057 Plug Switch with Fuse Blocks and additional plug for bridging around fuse, with end connections for 1 in. x $\frac{1}{4}$ in. flat bar.....	4.75
65059 Plug Switch with Fuse Blocks and additional plug for bridging around fuse, with one end connection for $\frac{1}{2}$ in. round rod and the other for 1 in. x $\frac{1}{4}$ in. flat bar.....	4.75
65061 Plug Switch with end connections for $\frac{1}{2}$ in. round rod....	3.00
65063 Plug Switch with end connections for 1 in. x $\frac{1}{4}$ in. flat bar.	3.00
65065 Plug Switch with one end connection for $\frac{1}{2}$ in. round rod and the other for 1 in. x $\frac{1}{4}$ in. flat bar.....	3.00

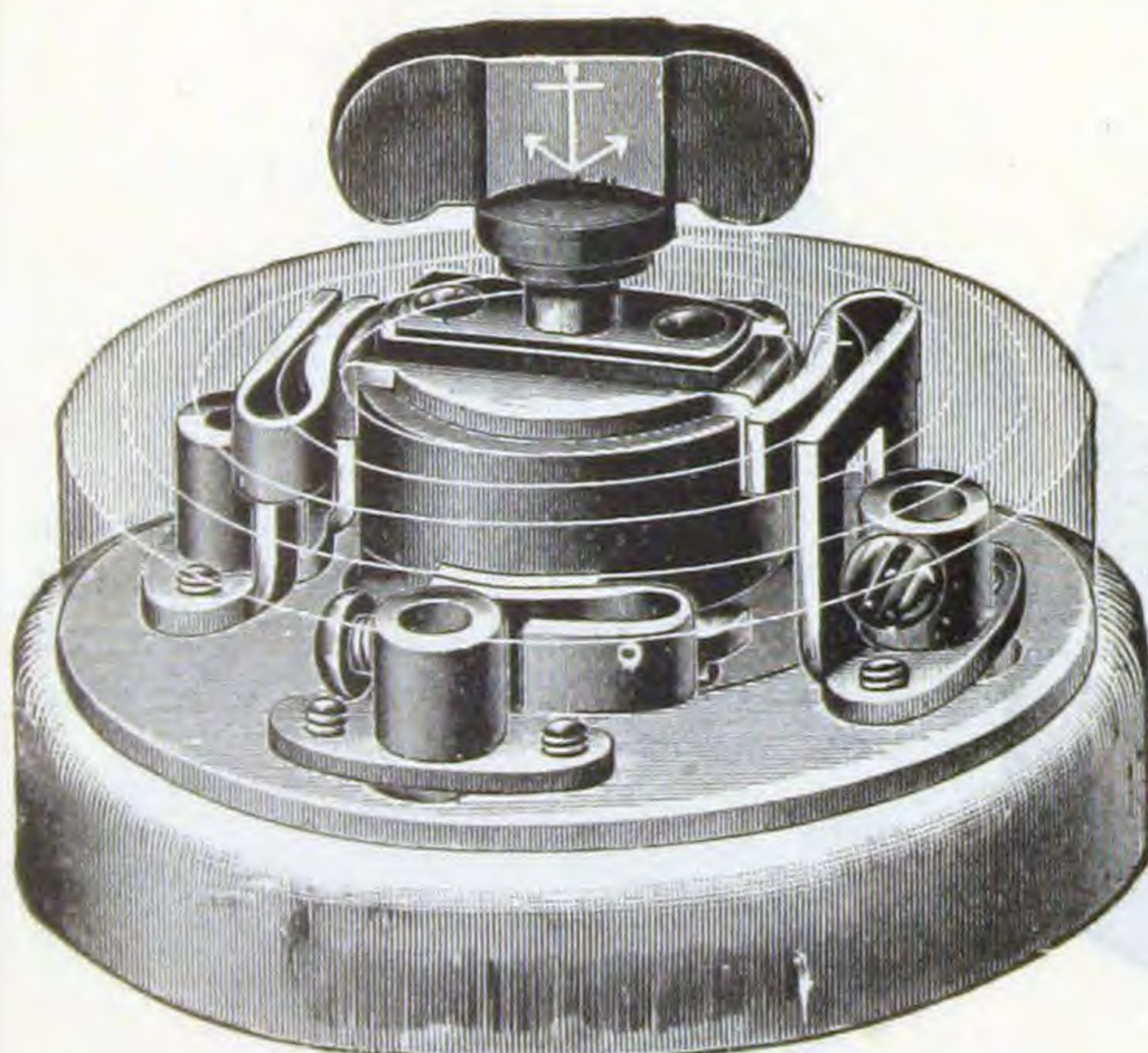




Cat. No. 10202. INTERIOR S. P. SWITCH.

## Anchor Switches.

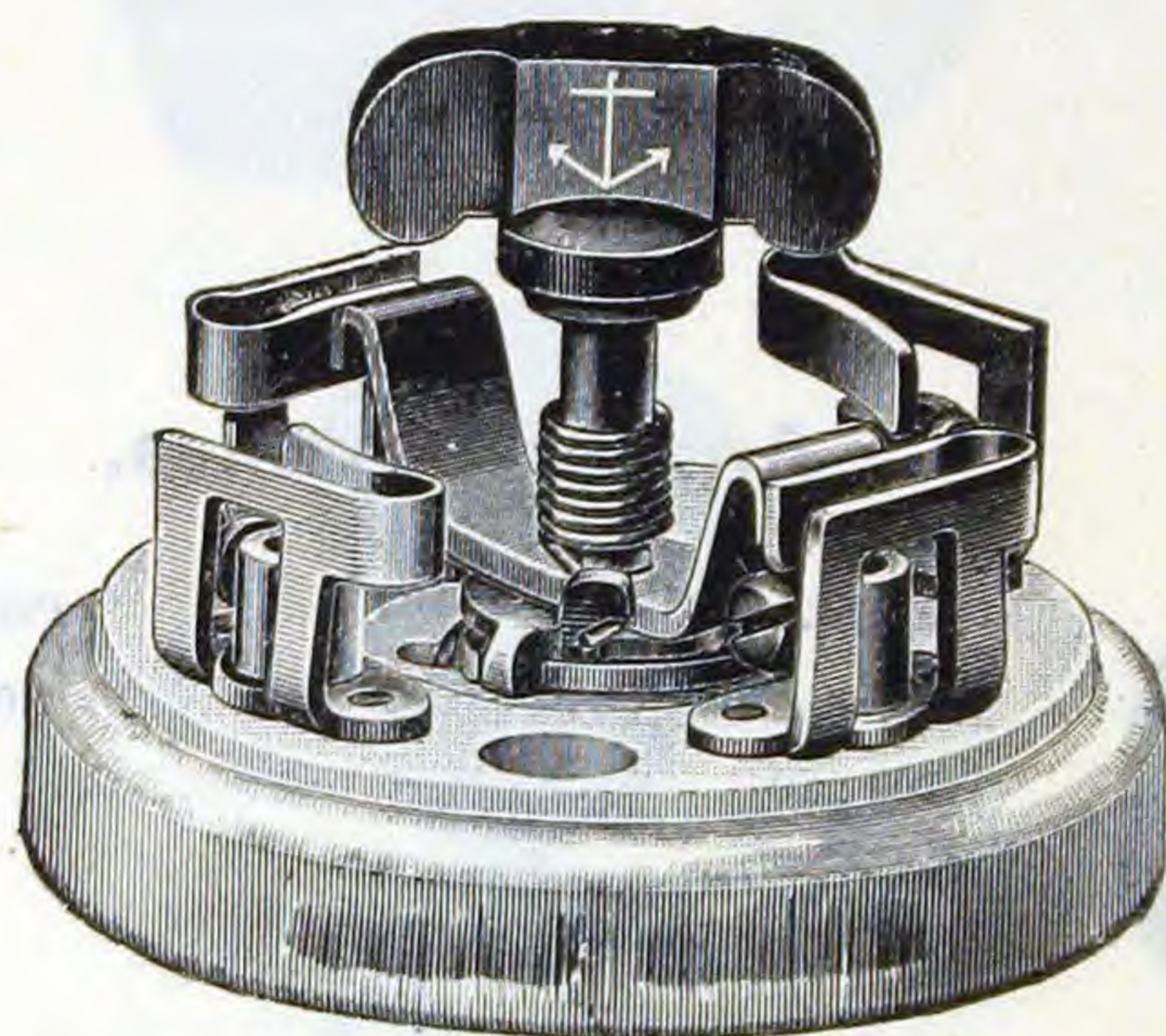
Cat. No.		Price.
10202	5 Amperes S. P.....	\$0.27
10203	10    "        " .....	.33



Cat. No. 10204. D. P. SWITCH.

10204	10 Amperes D. P.....	.63
10205	20    "        " .....	1.00
10206	30    "        " .....	1.26



**ANCHOR SWITCHES.**

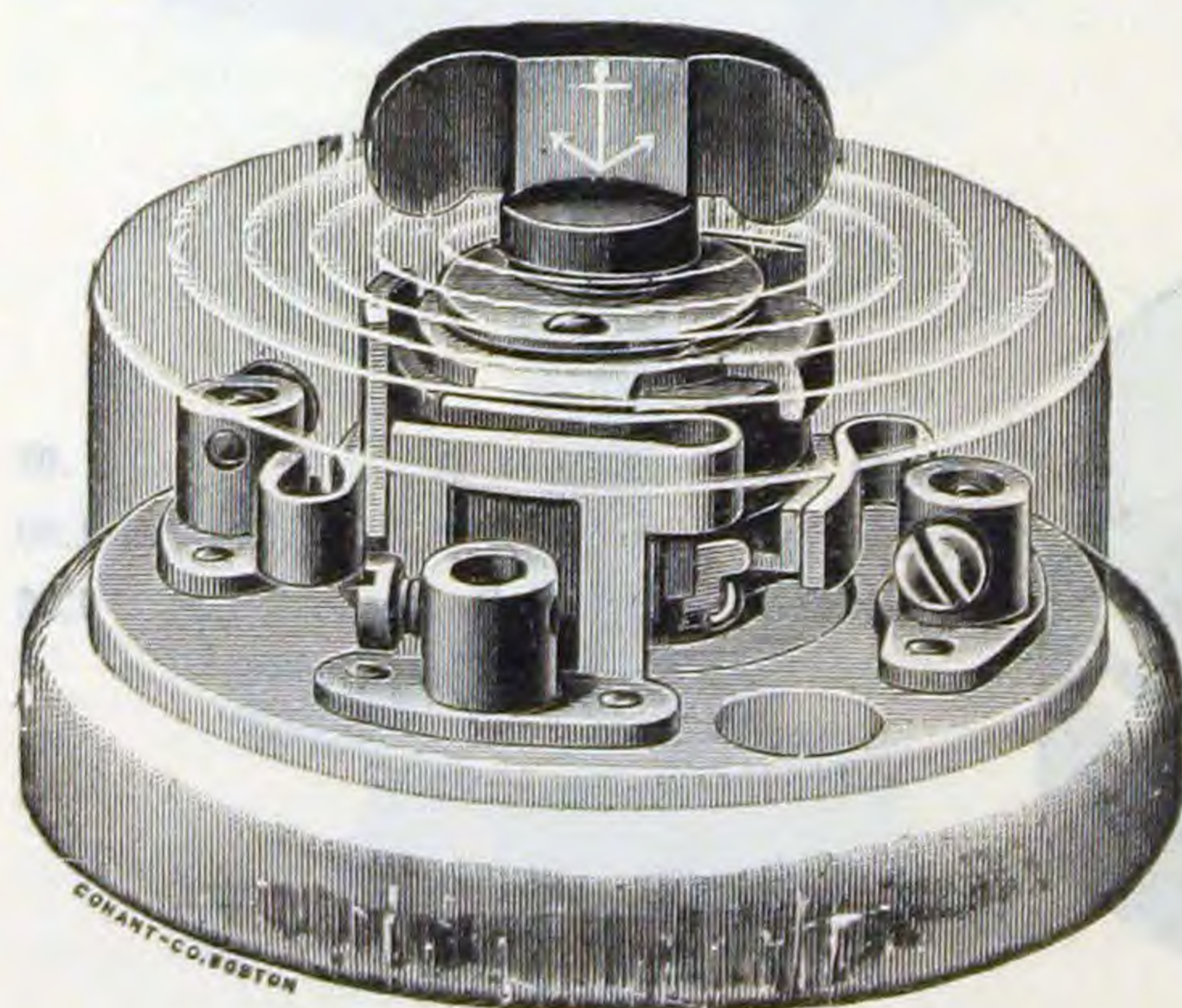
Cat. No. 10207.

**3 Pt. Switch.**

Patented October 1, 1895.

3 Pt. Switches are used to control lights from either one of two points.

Cat. No.	Price.
10207 3 Pt. Switch. ....	\$0.60



Cat. No. 10208.

**4 Pt. Switch.**

Patented October 1, 1895.

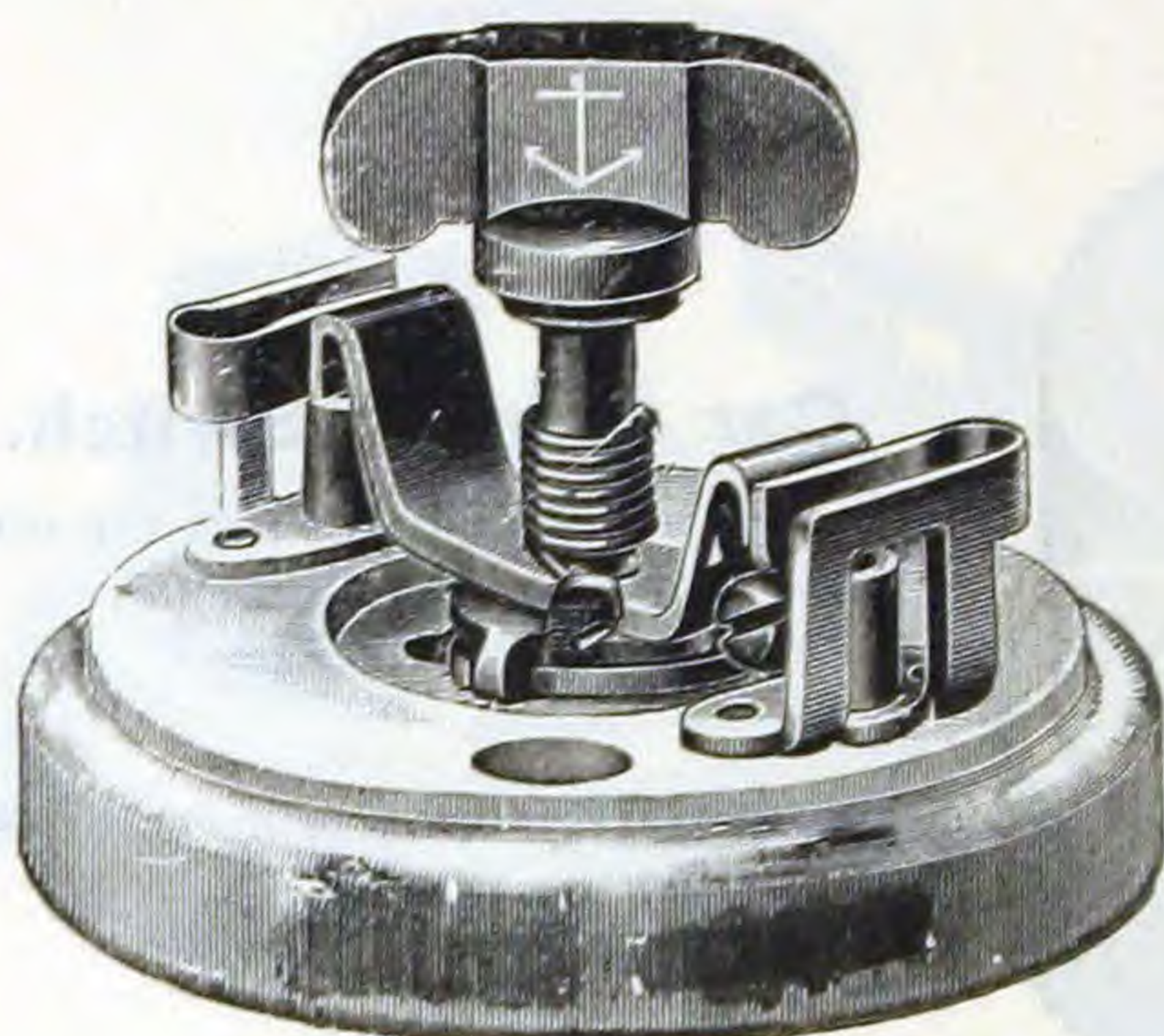
To control lights from three or more points, two 3 Pt. Switches are used at two of the points, and a 4 Pt. Switch at each additional point up to any desired number.

10208 4 Pt. Switch.....	.90
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**ANCHOR SWITCHES.**

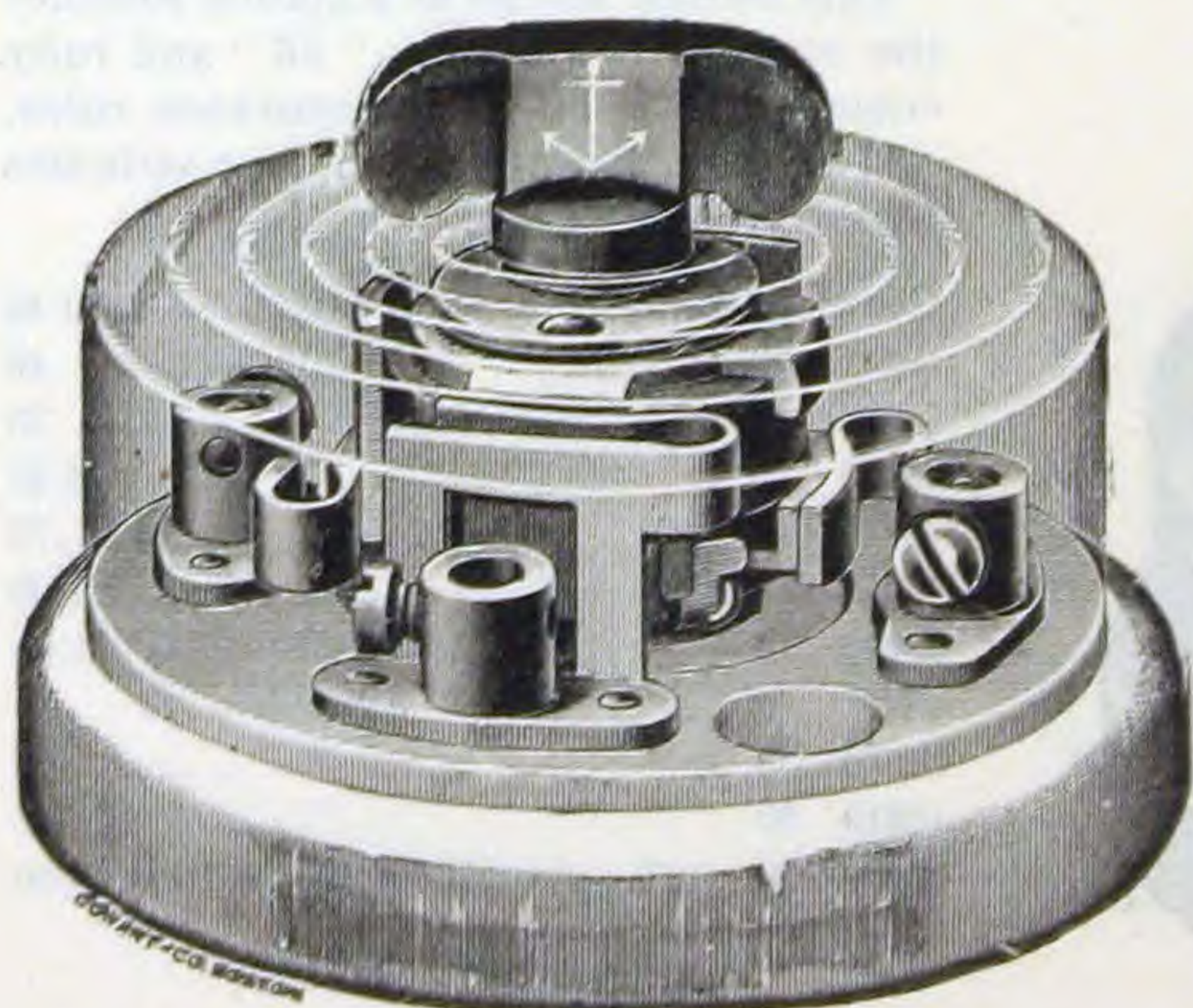
Cat. No. 10221.

**500 Volt Switch.**

This switch has a long break and is suitable for electric car or other high voltage service.

Made in two sizes.

Cat. No.	Price.
10221 5 Ampere 500 Volt Switch.	\$0.60
10222 10 " " " "	1.26



Cat. No. 10223.

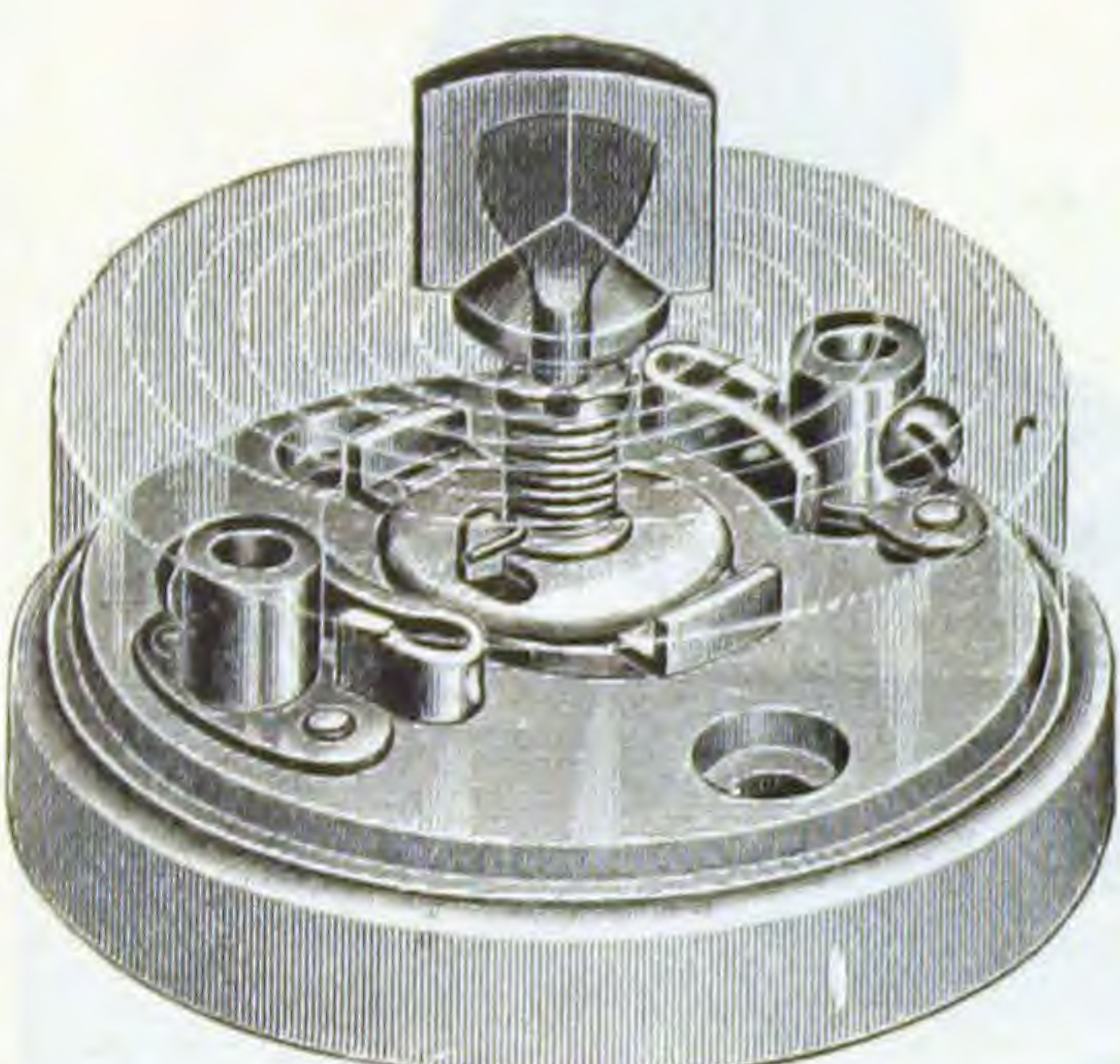
**Electrolier Switch.**

With this switch three different combinations or groups of lamps in an Electrolier may be controlled.

One turn of the handle lights the first group, another turn lights a second group, a third turn lights all the lamps, while the fourth turns them all out.

10223 10 Amp. Electrolier Switch without dial....	\$0.90
10224 10 Amp. Electrolier Switch with dial.....	1.05

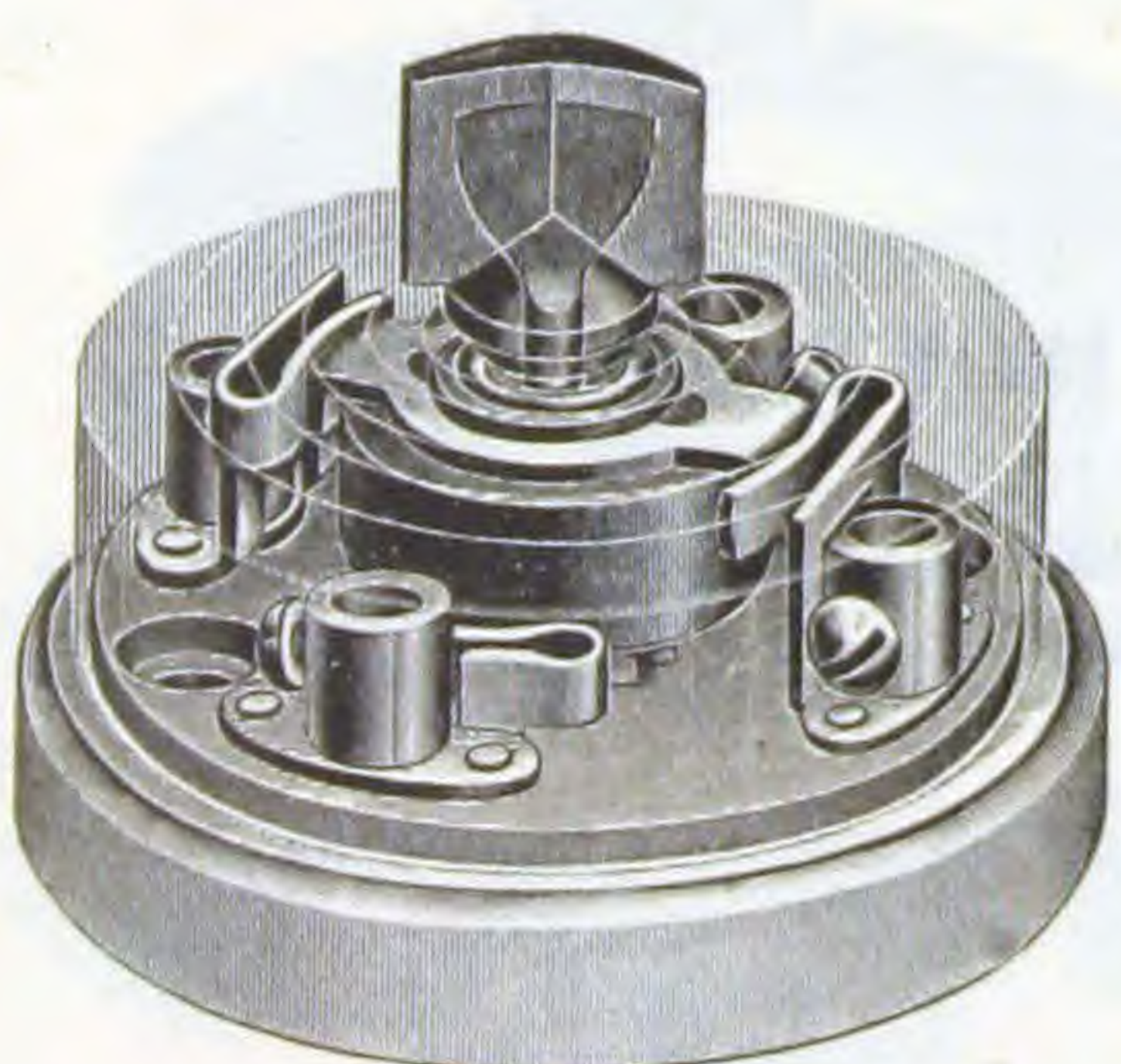




Cat. No. 10225.

**Hart Snap Switches.**

Cat. No.		Price.
10225	5 Amperes, Nickel-Plated Single-Pole...	\$0.60

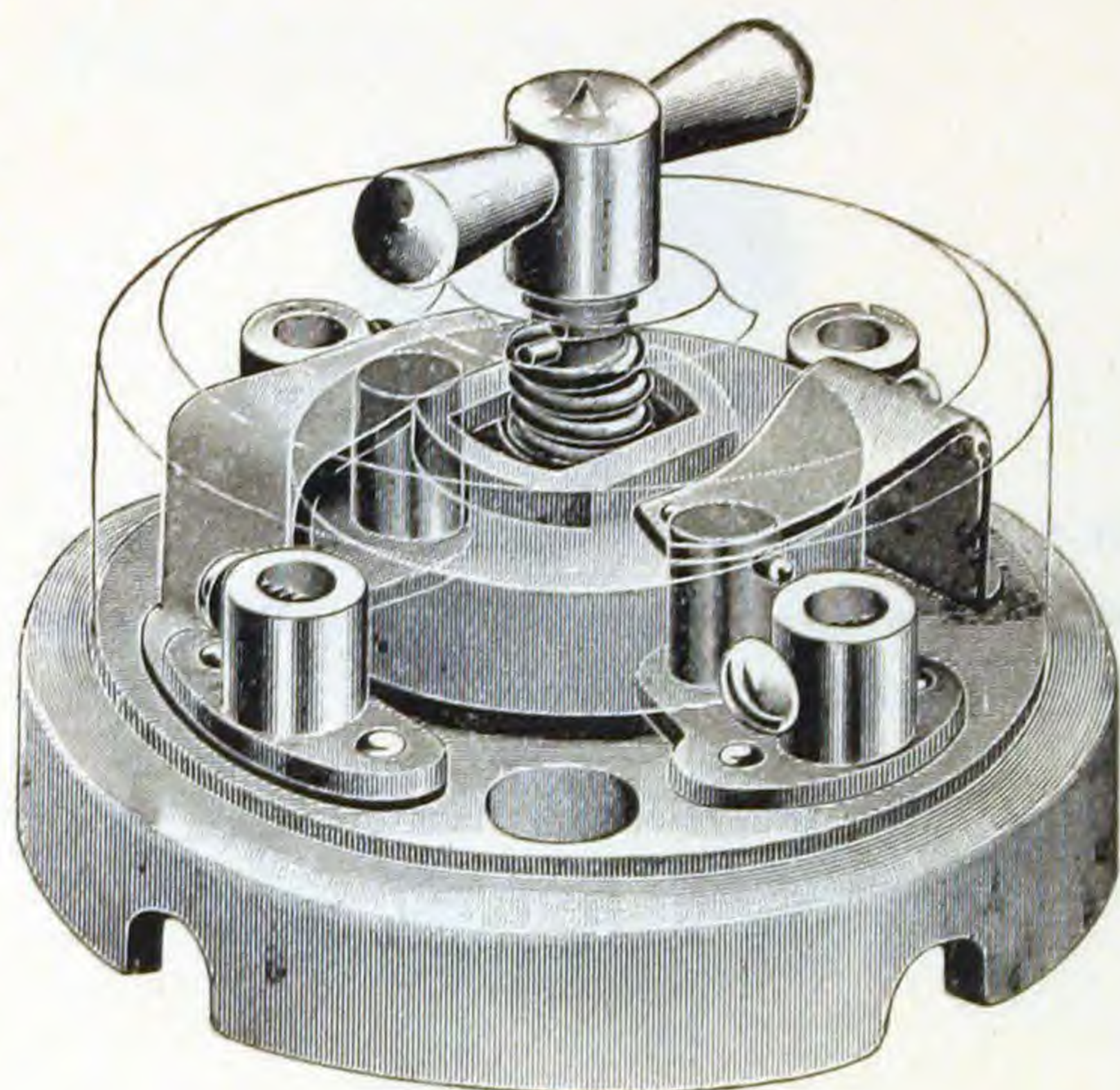


Cat. No. 10226.

**Hart Snap Switches.**

10226	10 Amperes, Double-Pole.....	1.50
10227	15     "     "     " .....	2.00
10228	30     "     "     " .....	2.50

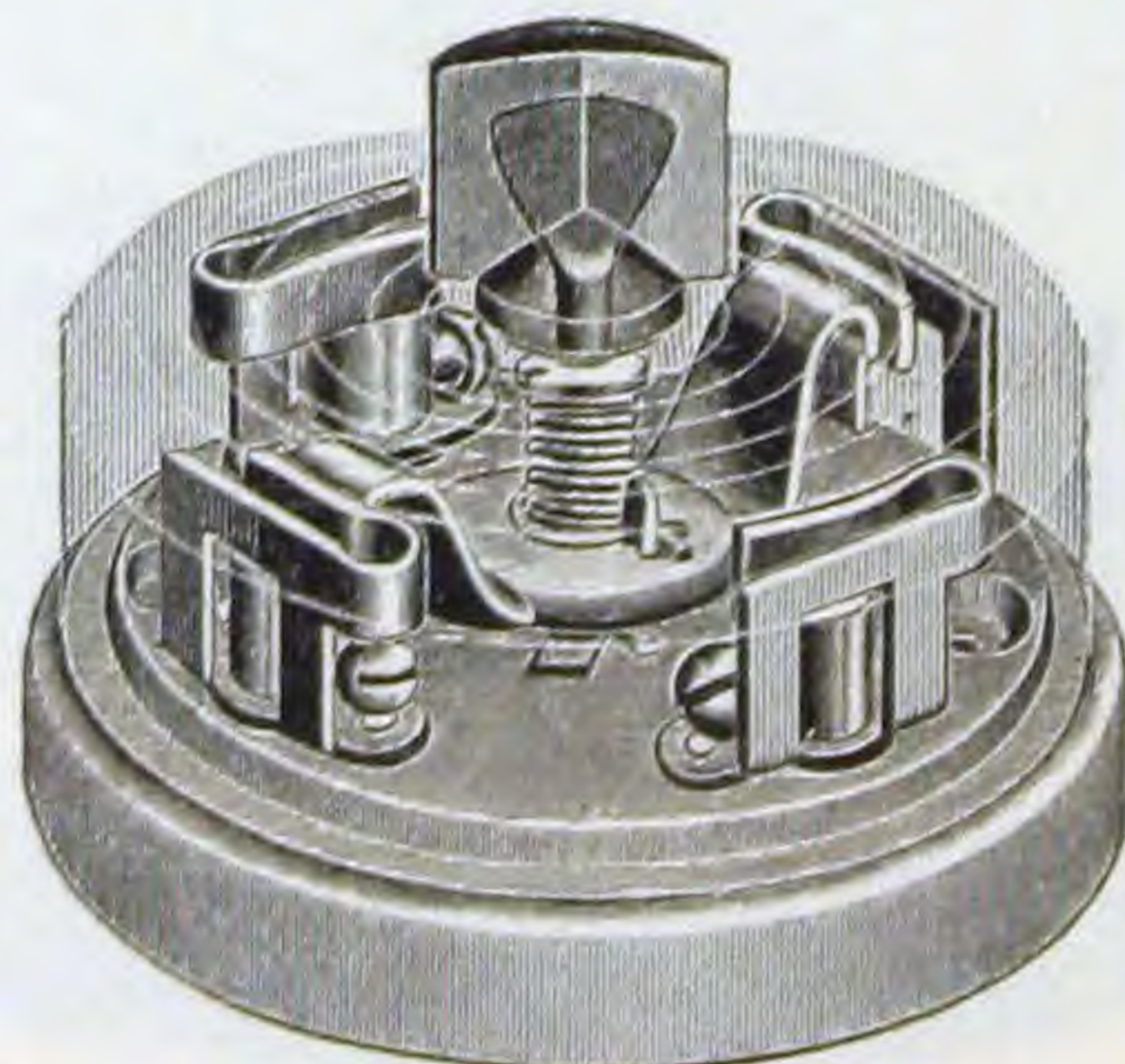




Cat. No. 10229.

### Hart Snap Switches.

Cat. No.	Price.
10229 50 Amperes, Double-Pole..	\$7.00



Cat. No. 10230.

### Hart Snap Switches.

10230	10 Amperes, Three-way...	1.50
10231	10 " Four-way....	1.60



## Paiste Single-Pole Switch.

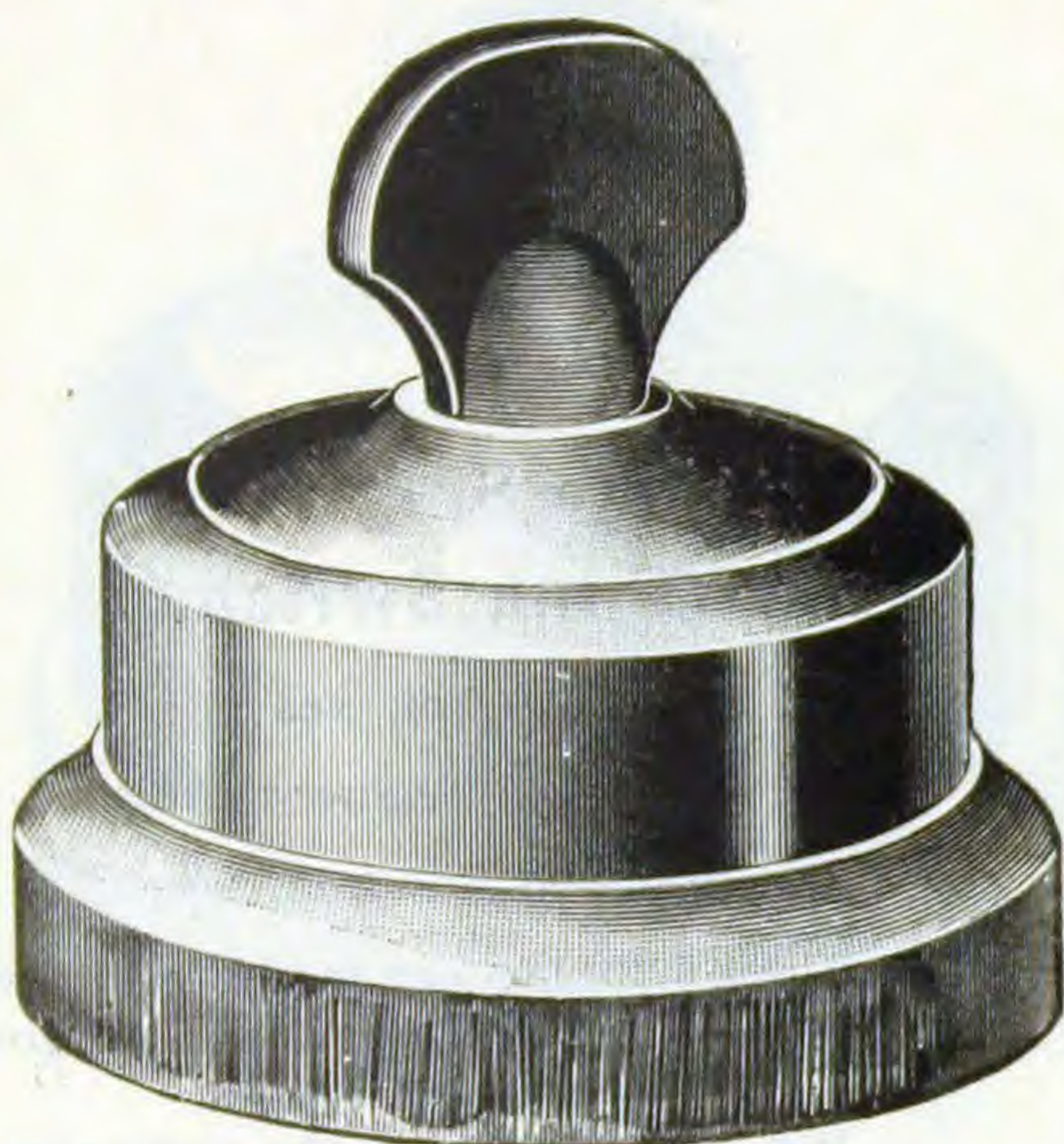
Five Amperes.

Patented September 13, 1881.

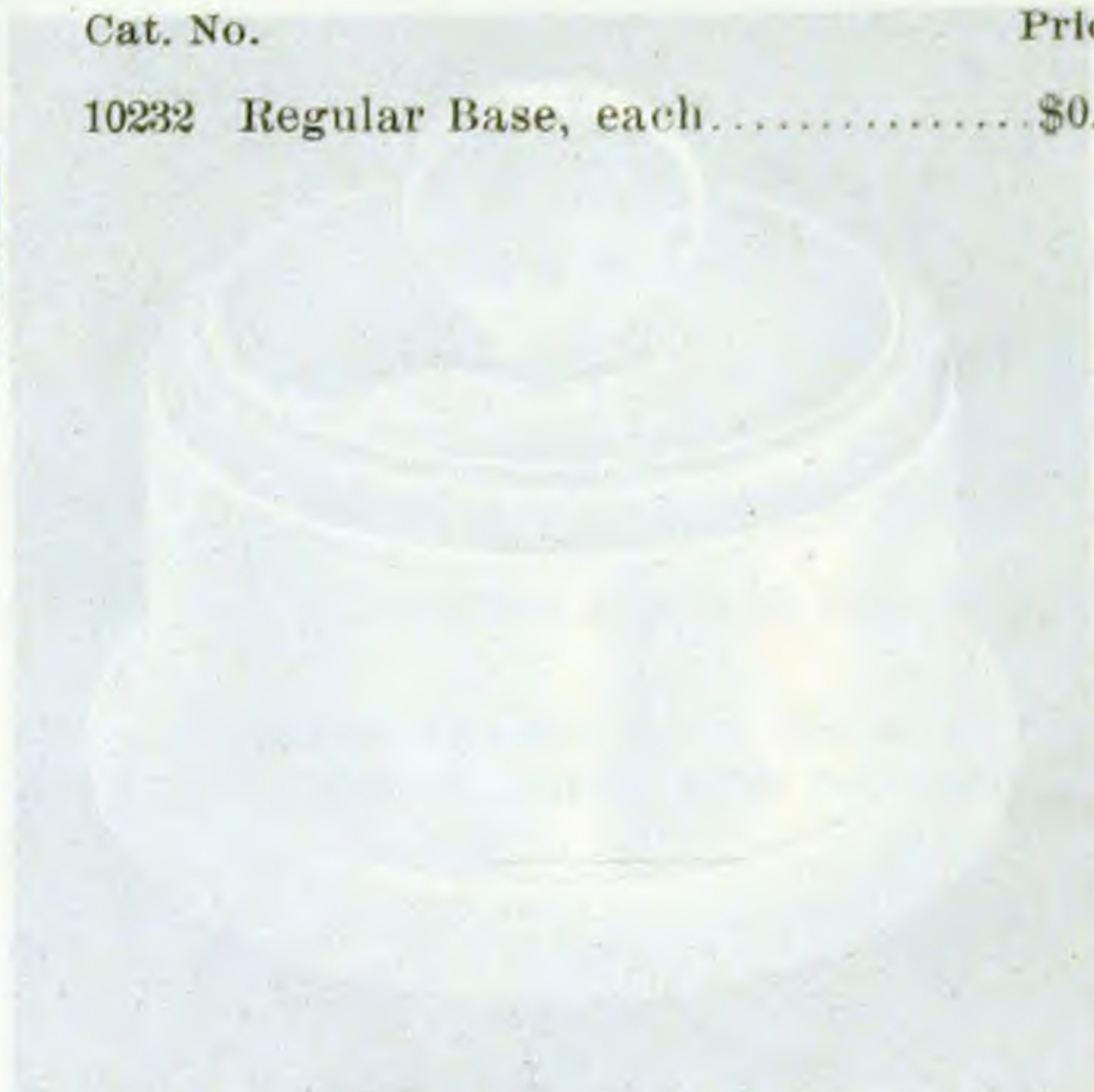
Patented March 12, 1889.

These switches are always finished with nickel caps, but when so ordered, can be furnished with any style of finish desired.

Cat. No.	Price.
10232 Regular Base, each.....	\$0.25

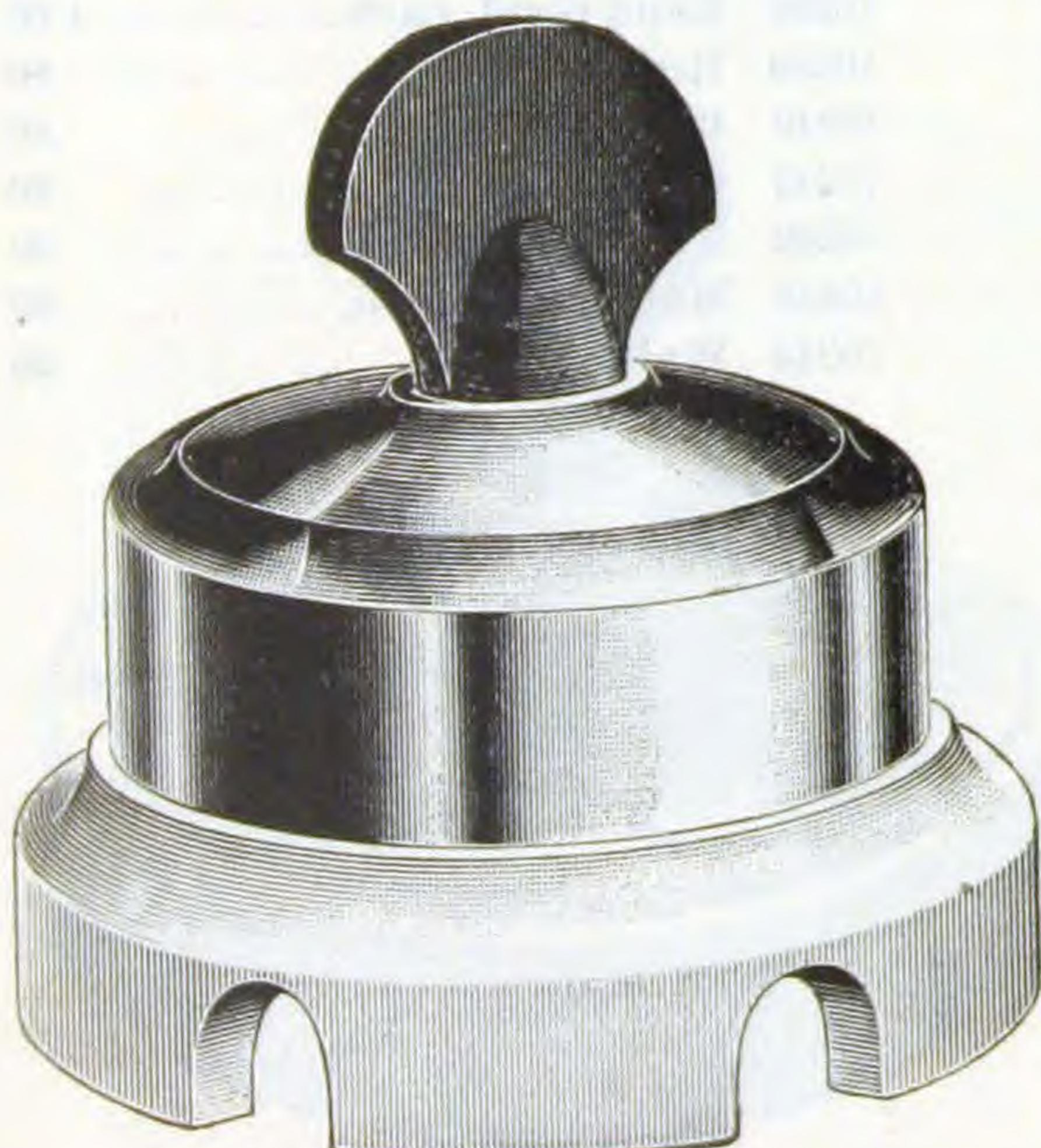


Cat. No. 10232.



## Paiste Single-Pole Switch.

10233 Grooved Base, each.....	.25
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Cat. No. 10233.





Cat. No. 10234.

## Paiste Single-Pole China Switch.

Five Amperes.

Patented September 13, 1881.

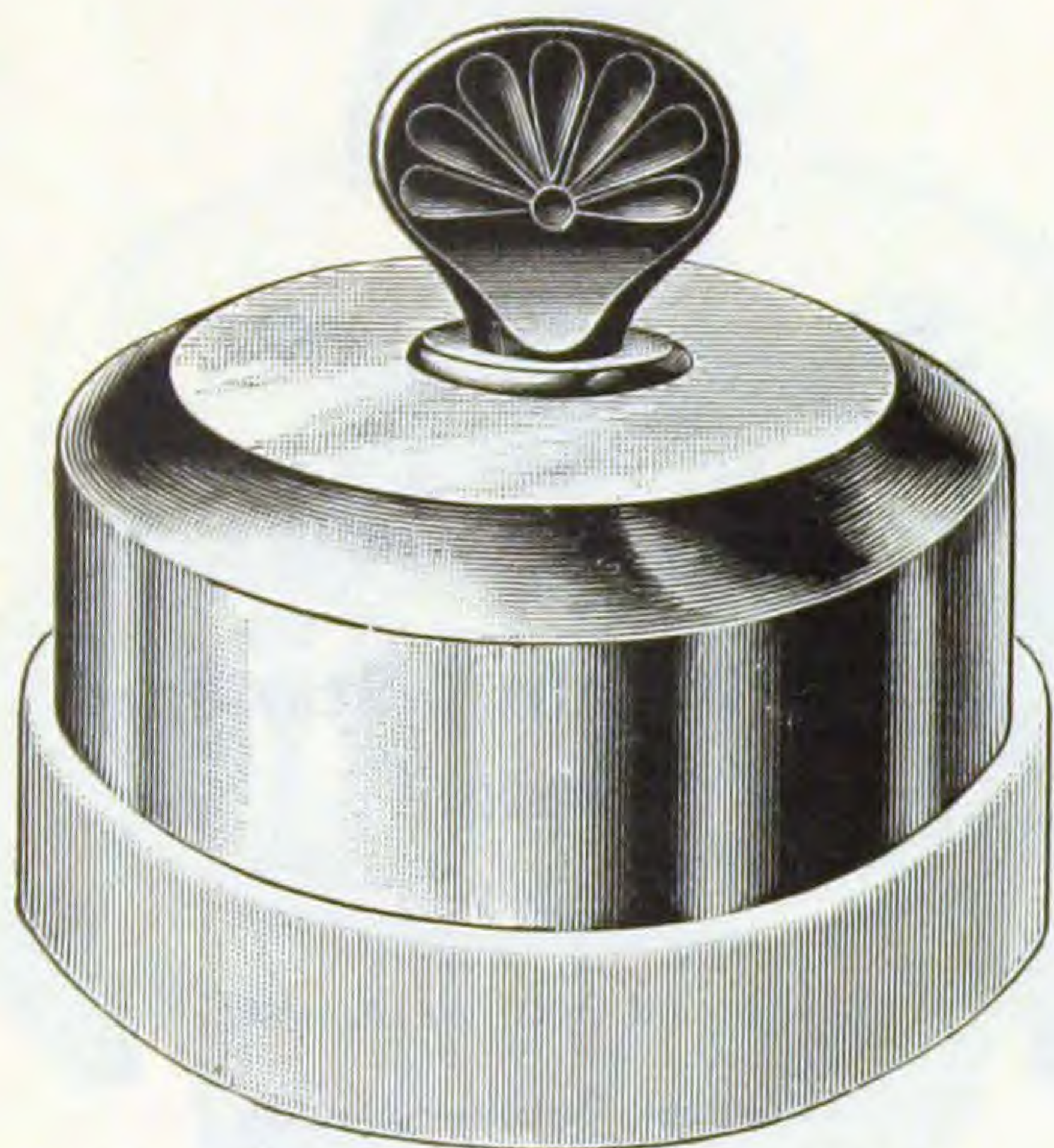
Patented March 12, 1889.

These switches are made from the best imported English China and are designed for high-class work.

We carry in stock the following finishes, and can match any style of finish at short notice.

Cat. No.	Price.
10234 White, each.....	\$0.72
10235 Ivory, each.....	.72
10236 Black, each.....	.80
10237 "Roman Gold" Flaked, ea.	1.00
10238 Band Gold, each.....	1.00
10239 Red, each.....	.80
10240 Blue, each.....	.80
10241 Oak, each.....	.80
10242 Antique Oak, each.....	.80
10243 Mahogany, each.....	.80
10244 Walnut, each.....	.80





Cat. No. 10245. SWITCH, WITH COVER.

**Paiste Three-Point Switches.**

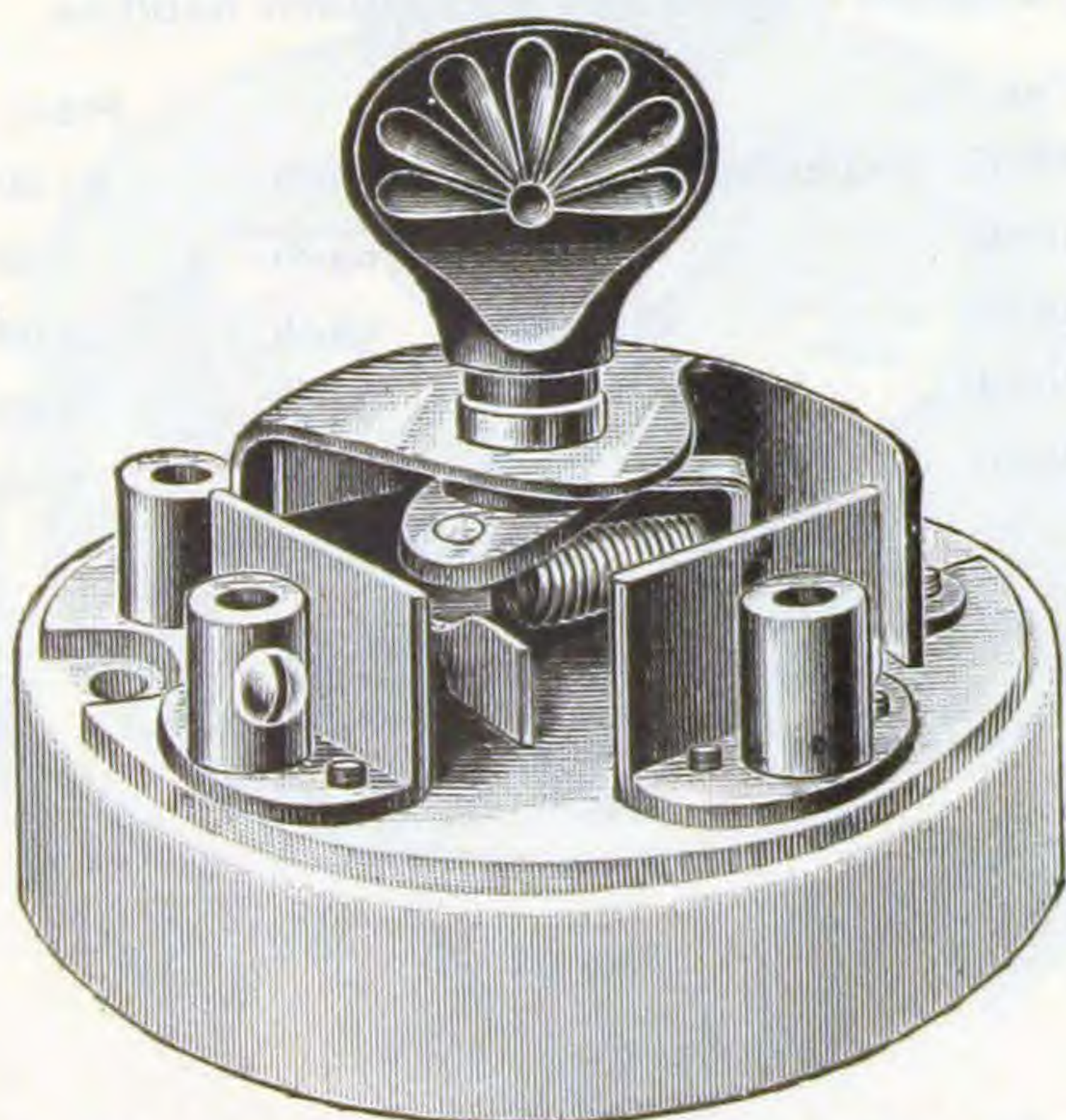
Ten Amperes.

Patented September 13, 1881.

Patented March 12, 1889.

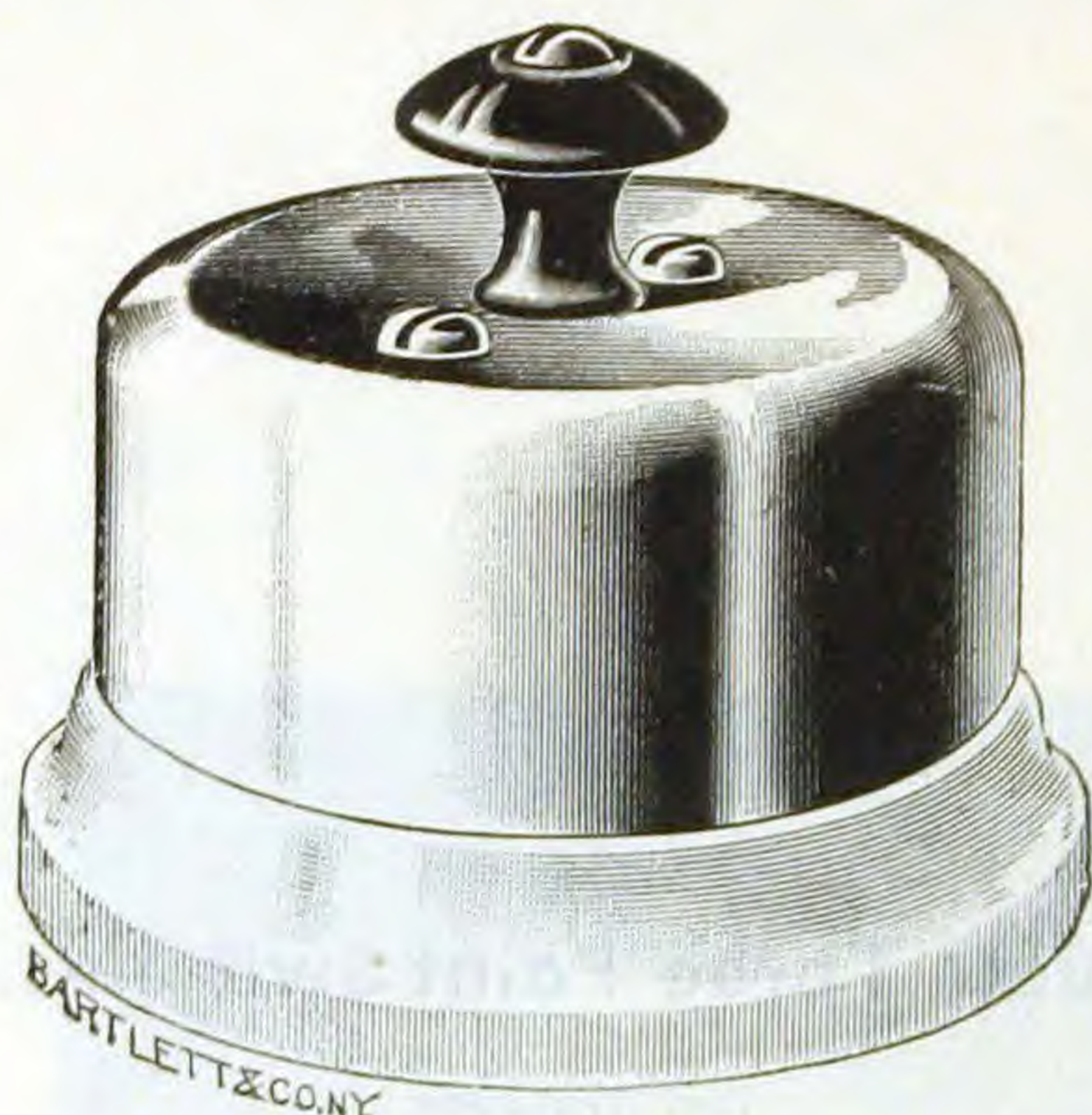
These switches are made the same as the regular Ten Amperes, with porcelain base and nickel cover.

Cat. No.	Price.
10245 Regular Style, each....	\$0.70
10246 Grooved Base, each. ....	.70



Cat. No. 10245. SWITCH, WITH COVER REMOVED.





Cat. No. 10247. SWITCH, WITH COVER.

### The "Bryant" Standard Switch.

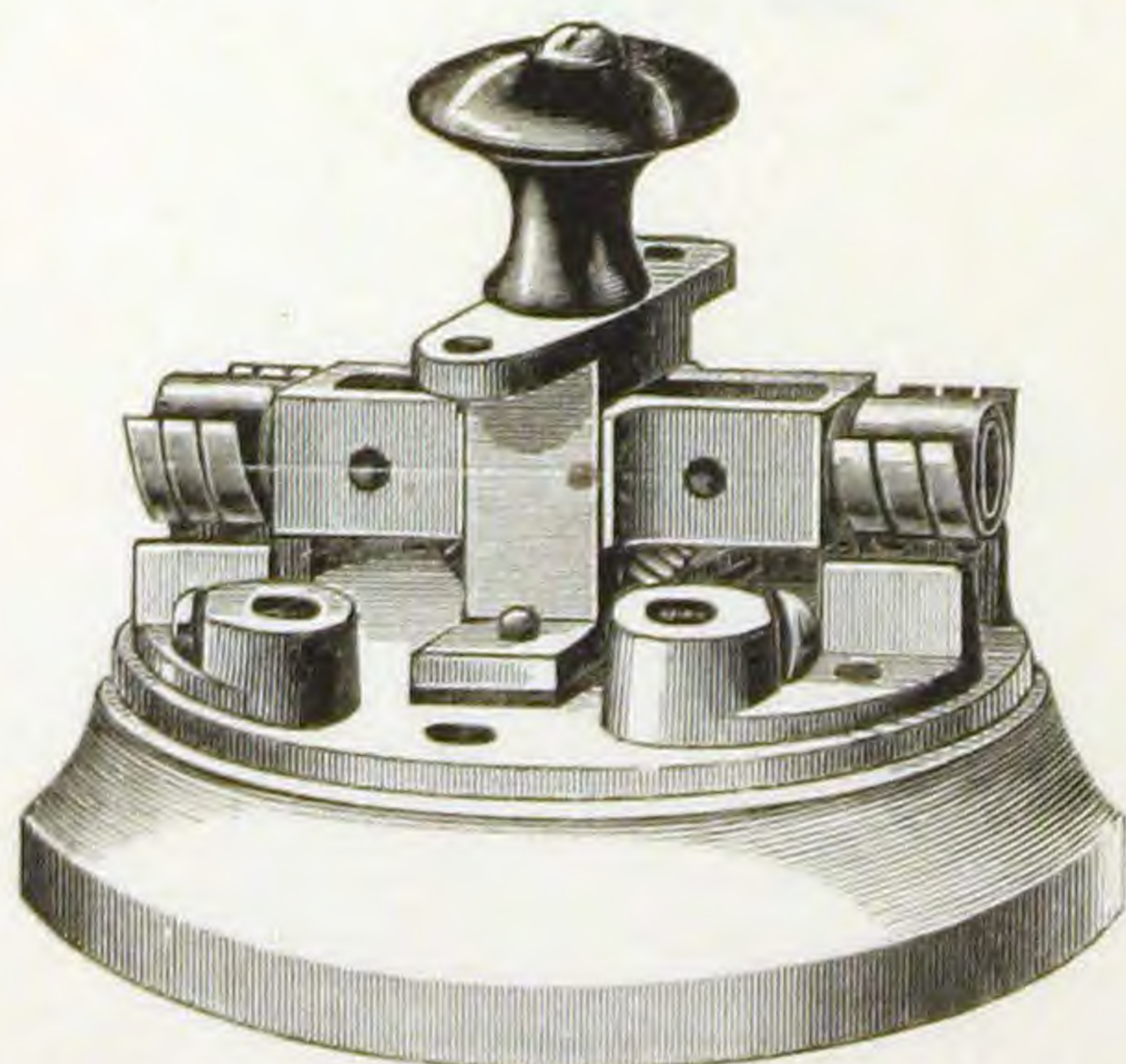
Double Pole.

Patented October 23, 1888.

Patented October 30, 1888.

These switches are mounted on porcelain bases, and are made with extra heavy contacts and wide breaks.

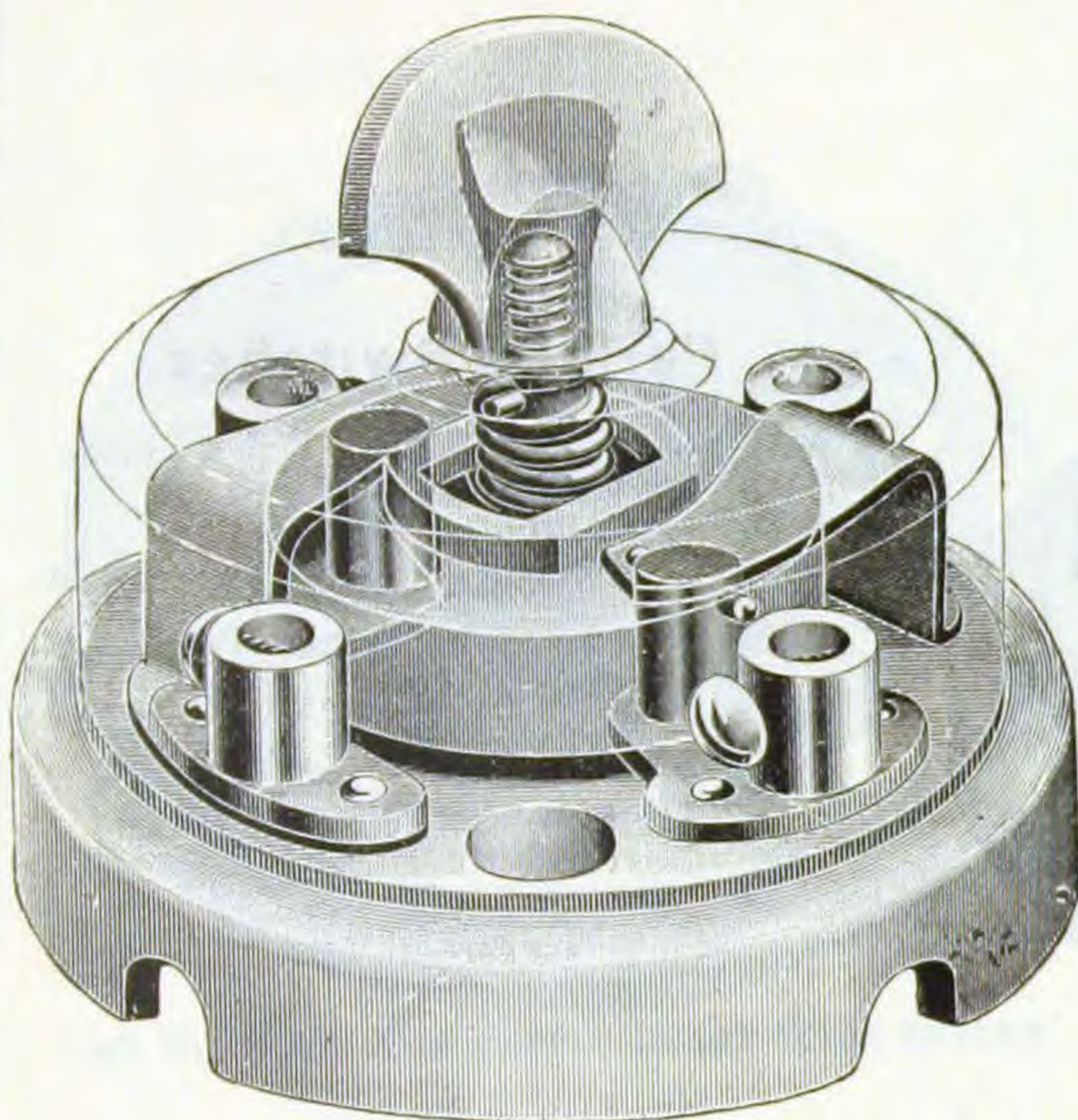
They are finished with nickel-plated caps, lined with insulating material, and enameled knobs. Brass, bronze or ornamental caps can be furnished when specially ordered. We also make these switches for marine and government work, all metal parts being of phosphor bronze, and with rubber handles.



Cat. No. 10247. SWITCH, WITH COVER REMOVED.

Cat. No.	Price.
10247 Capacity, 10 Amperes, each.....	\$1.00
10248       "      15       "      each.....	1.50
10249       "      25       "      each.....	2.00
10250       "      40       "      each.....	3.00
10251       "      50       "      each.....	3.50



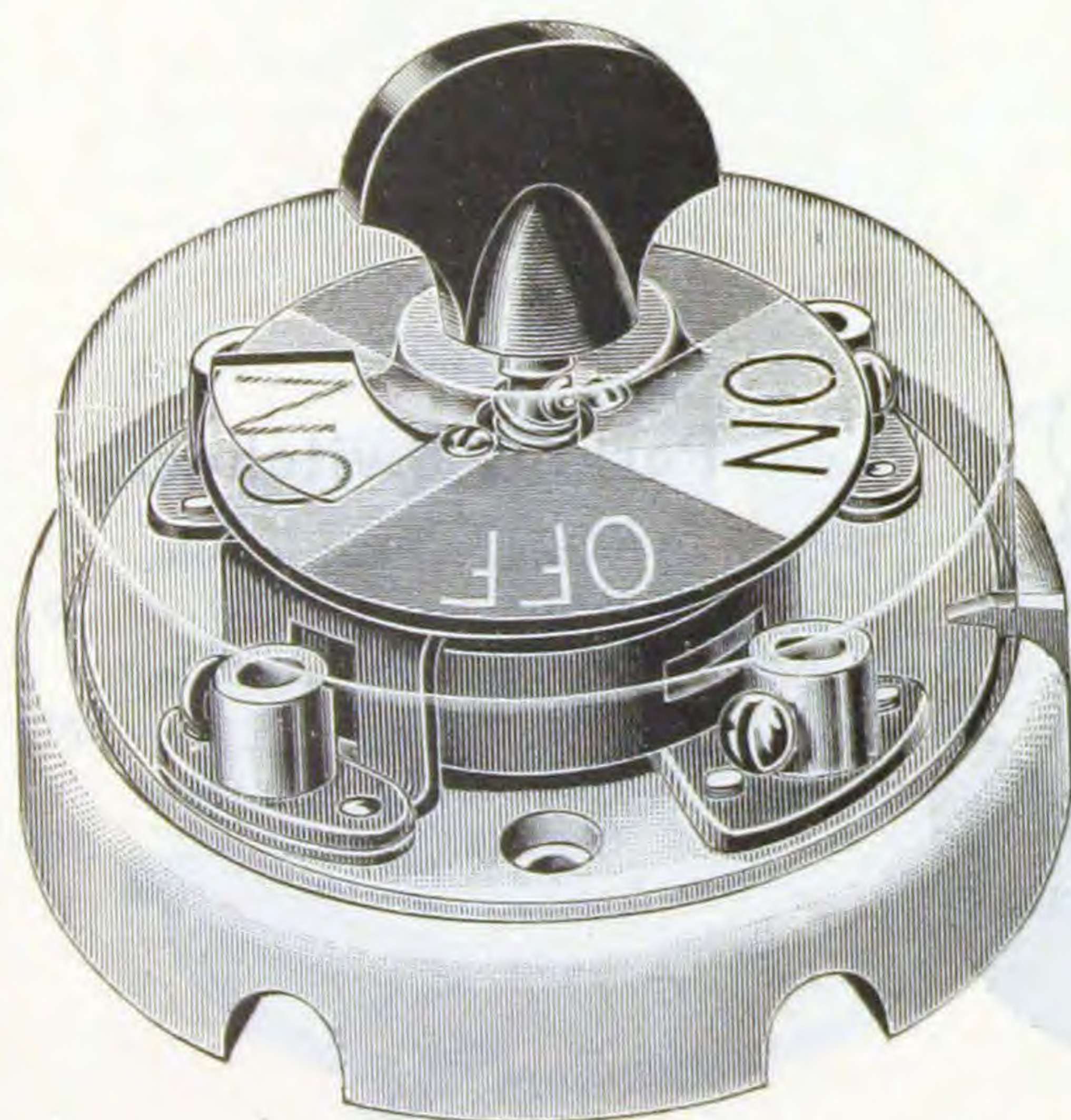


Cat. No. 10252. 10 AMPERE DOUBLE-POLE SWITCH.  
FULL SIZE.

## The Gibbs Switch.

Double-Pole, Double-Break.

Cat. No.	Price.
10252 10 Amperes.. ..	\$1.25
10253 15 " .. ..	1.75
10254 30 " .. ..	2.25
10255 50 " .. ..	5.00
10256 3-Point.....	1.25
10257 4-Point .....	1.25



Cat. No. 10258.

## Perkins Indicating Switch.

Indicating when current is on or off.

10258	10 Amperes, with dial.....	\$1.75
10259	15 " " " .....	2.25
10260	30 " " " .....	2.75
10261	50 " " " .....	5.50

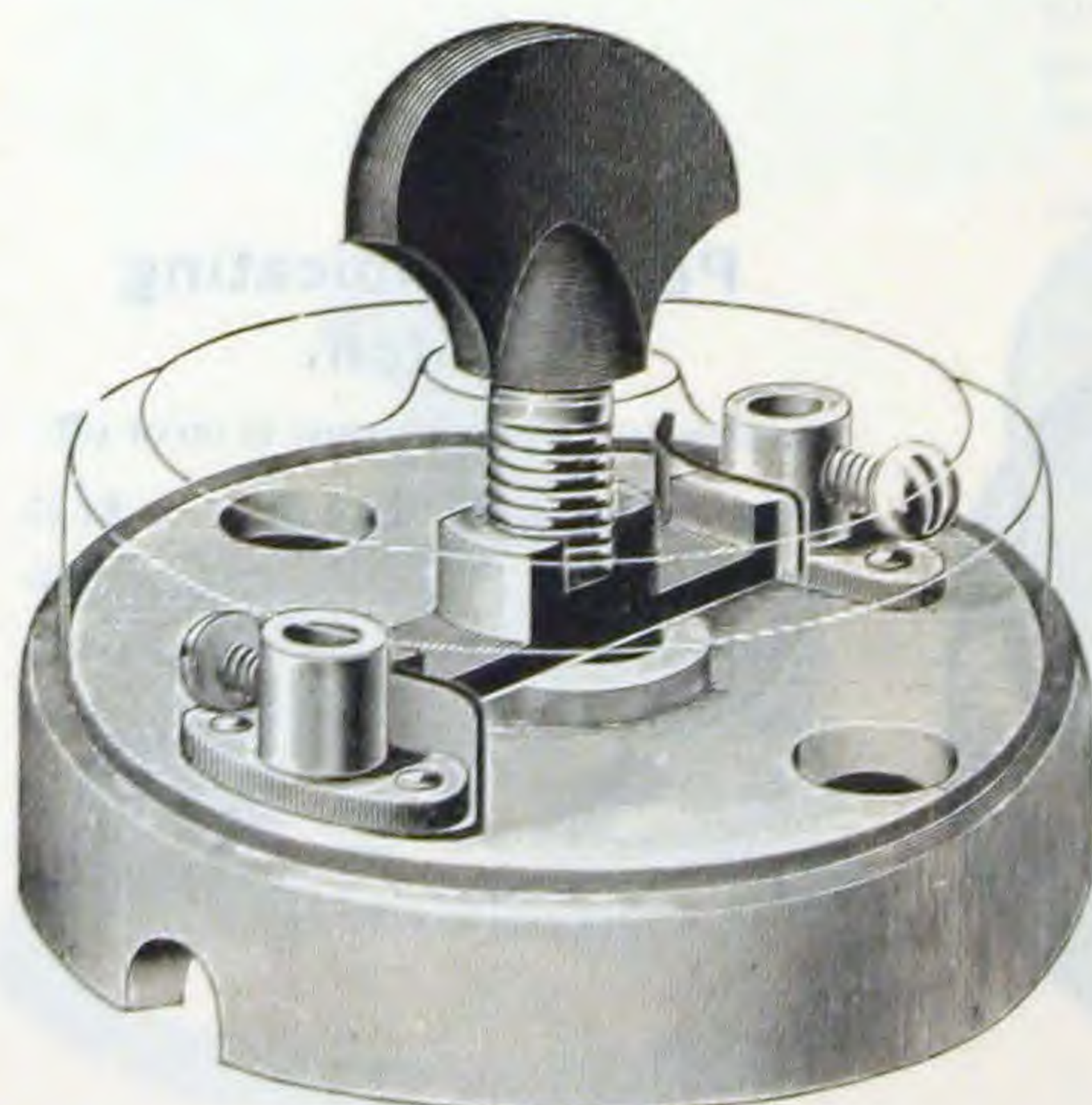




Cat. No. 10262.

**Perkins Switches.**

Cat. No.		Price.
10262	5 Amperes, Single-Pole, 120 volts .....	\$0.50
10263	10 Amperes, Single-Pole, 120 volts .....	.60

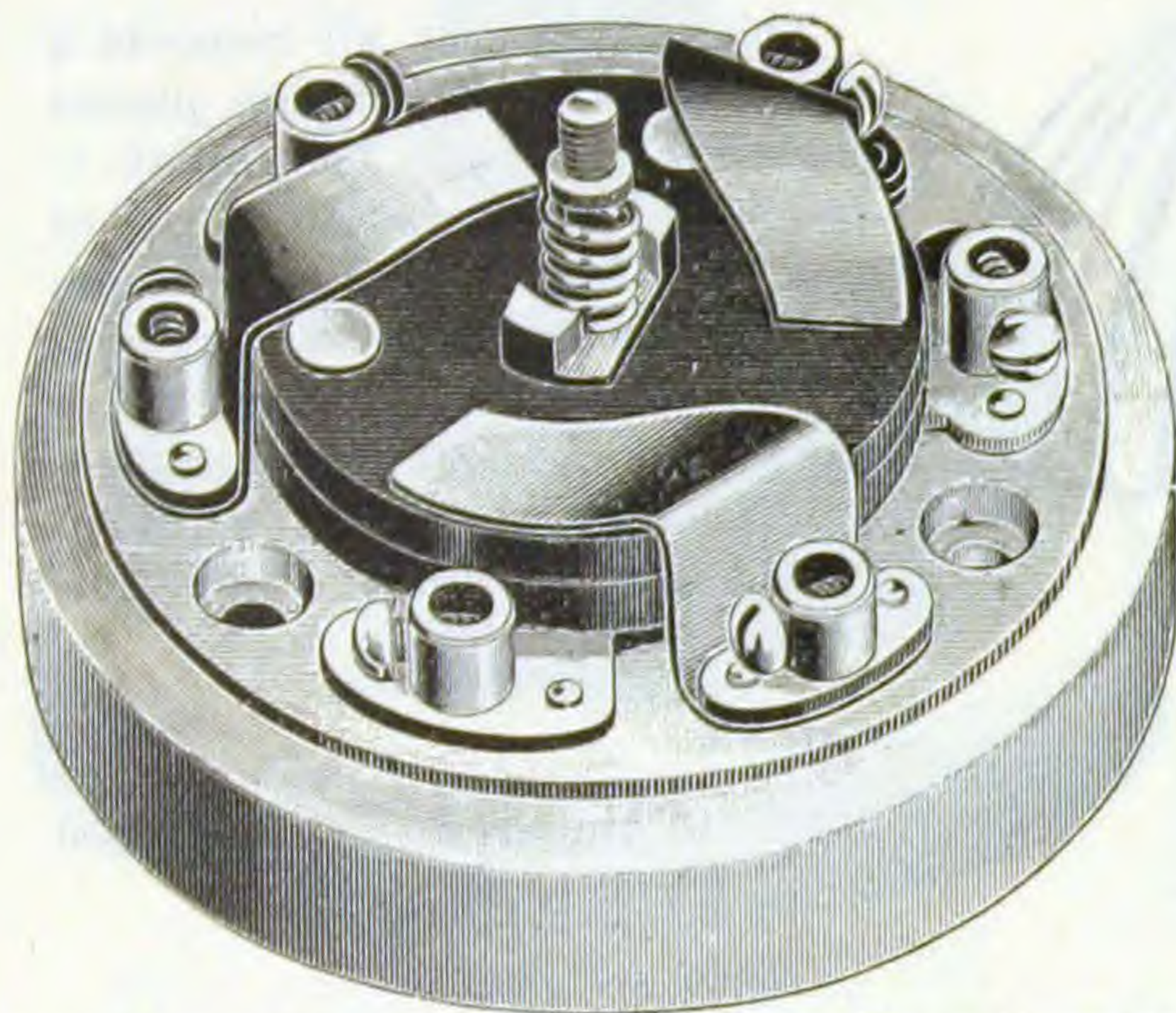


Cat. No. 10264.

**Perkins Switches.**

10264	5 Amperes, Single-Pole, 220 volts .....	.55
10265	10 Amperes, Single-Pole, 220 volts .....	.70
10266	3 Amperes, Single-Pole, 500 volts .....	.70



**PERKINS SWITCHES.**

Cat. No. 10267. FOR EDISON THREE-WIRE SYSTEM.

**Gibbs Switch.**

Cat. No.	Price.
10267 For Three-Wire System.....	\$3.00

One of the most ingenious applications of the Gibbs principle has been made to produce a switch which breaks simultaneously the three wires (each at two points) when used with the Edison Three-Wire System.

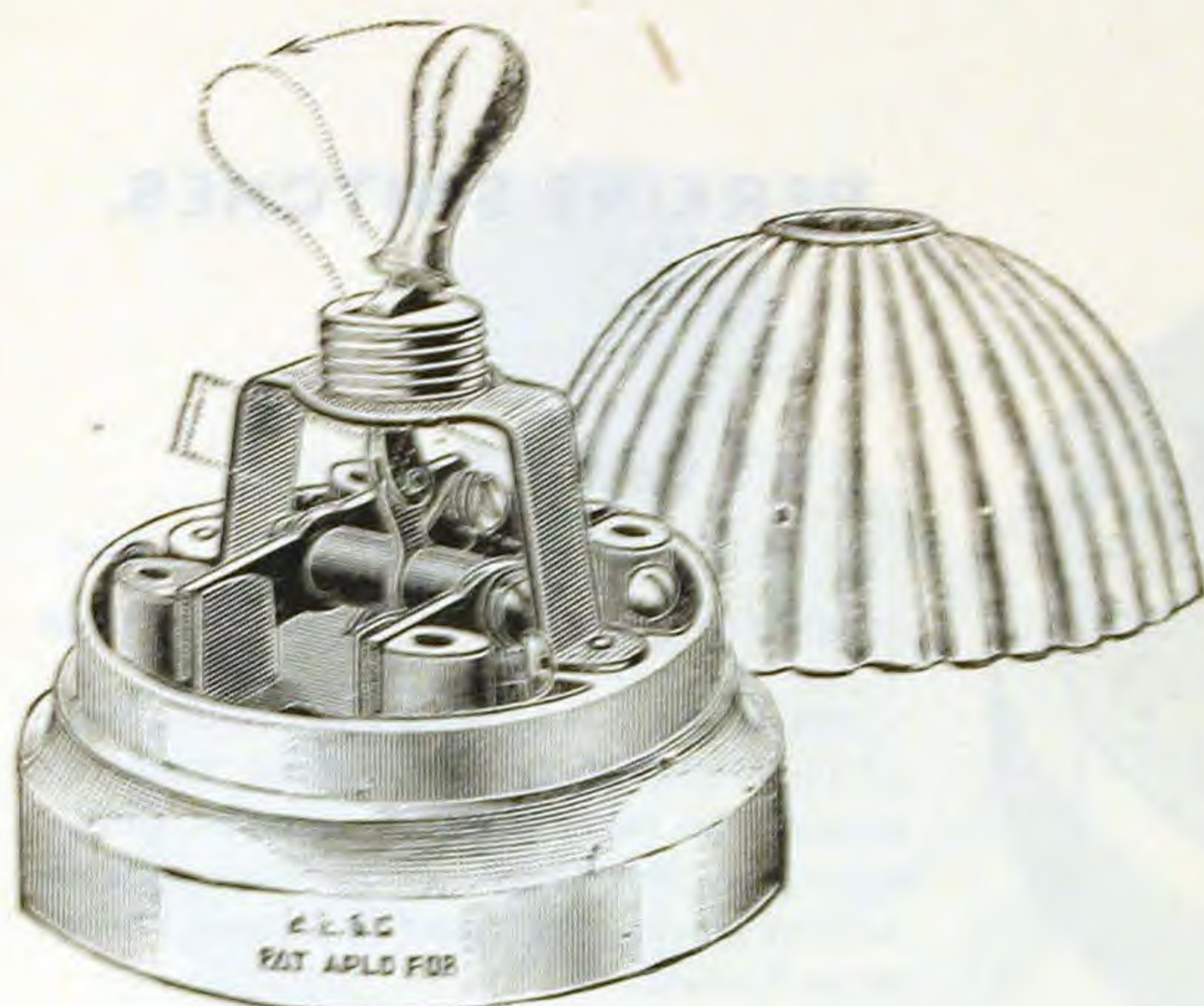


Cat. No. 10269.

**New England Switches.**

10268	5 Amperes, Double-Pole.....	\$1.25
10269	10    "                                    "    "    .....	1.75
10270	15    "                                    "    "    .....	2.00
10271	25    "                                    "    "    .....	2.80
10272	40    "                                    "    "    .....	3.50
10273	50    "                                    "    "    .....	4.25
10274	75    "                                    "    "    .....	8.00
10275	100   "                                   "    "    .....	9.50
10276	5    "                                    500 volts.....	1.25



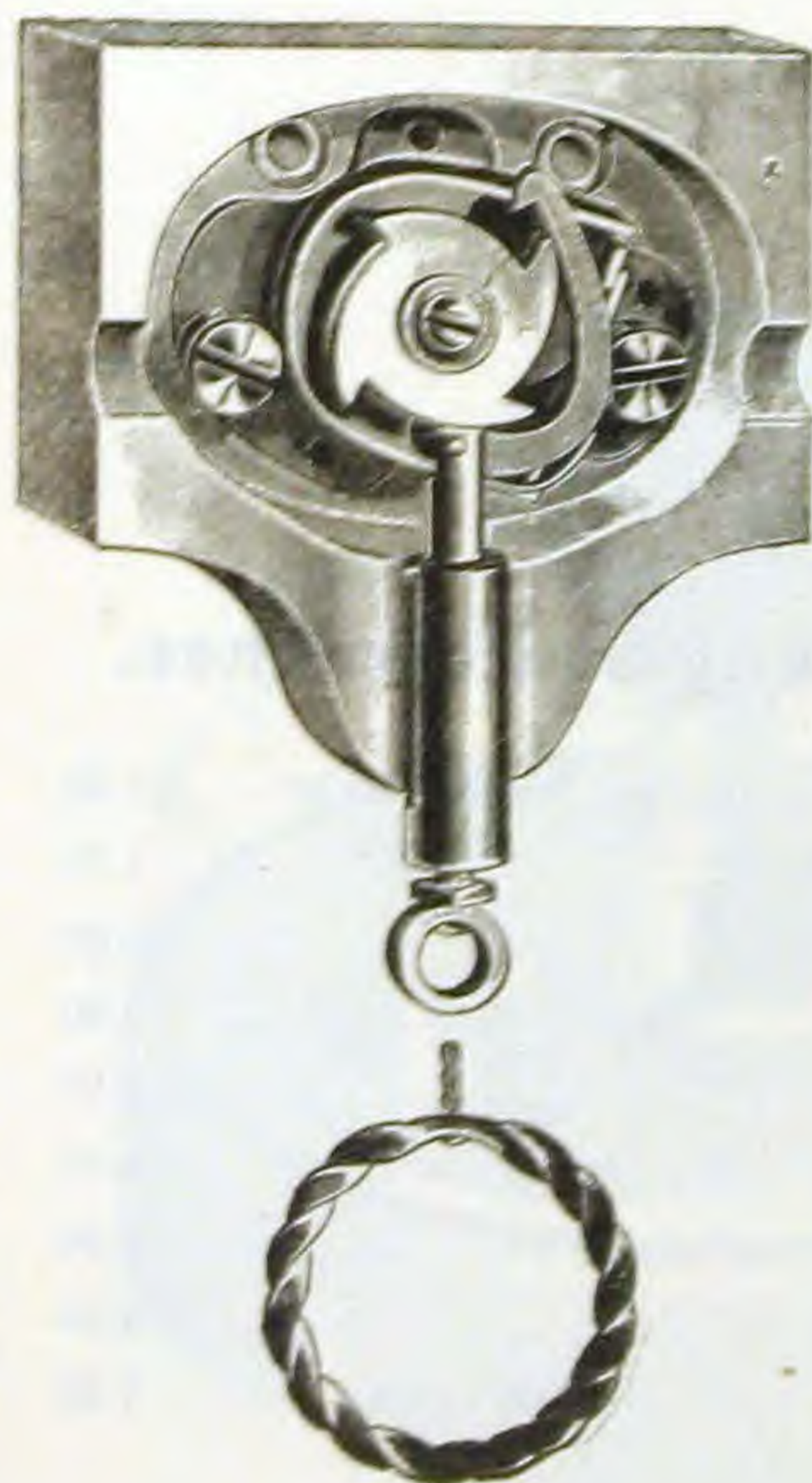


Cat. No. 10277.

### Canopy Switches.

This switch is in all respects a quick-break knife switch placed under a canopy. The break is quick and positive, entirely out of control of the hand. Contacts and blades are made of pure copper. Easily wired. It is well proportioned and neat in appearance. The canopy can be finished to match any fixtures at a small advance in cost.

Cat. No.	Price.
10277 15 Amperes.....	\$2.50



Cat. No. 10278.

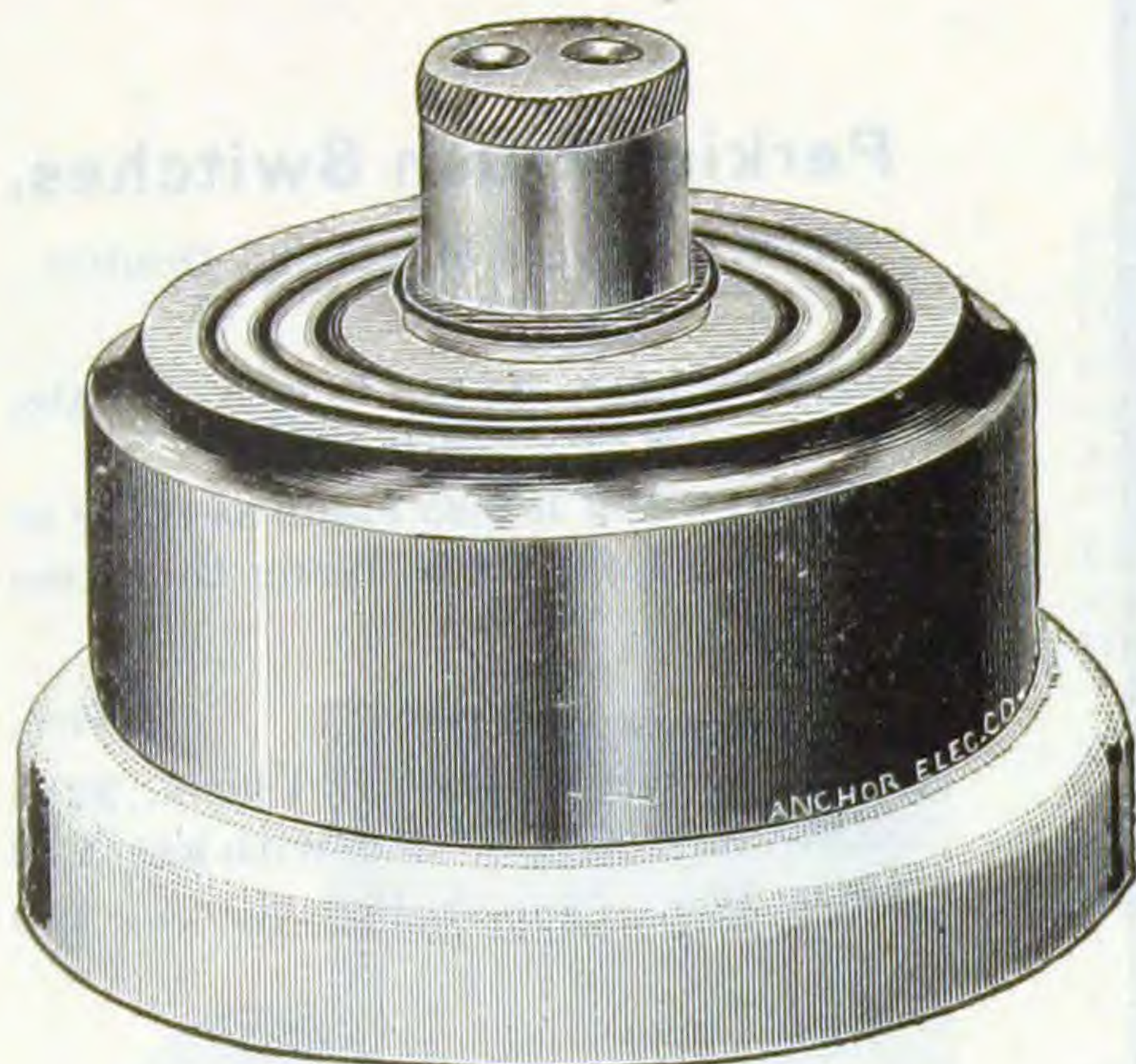
### Chandelier Switch.

This Chandelier Switch is intended to be placed in the canopy of the chandelier, and is fitted with a clamping attachment on the back which clamps around the pipe, and is held in place by a set-screw. It is rated at 10 amperes. The chain can be dropped down between the pipe and the shell of the chandelier, or through a small hole in the canopy outside of the chandelier. It is fitted with brass ring hanging below the chandelier, the first pull of which lights the entire chandelier, the next pull cutting it out.

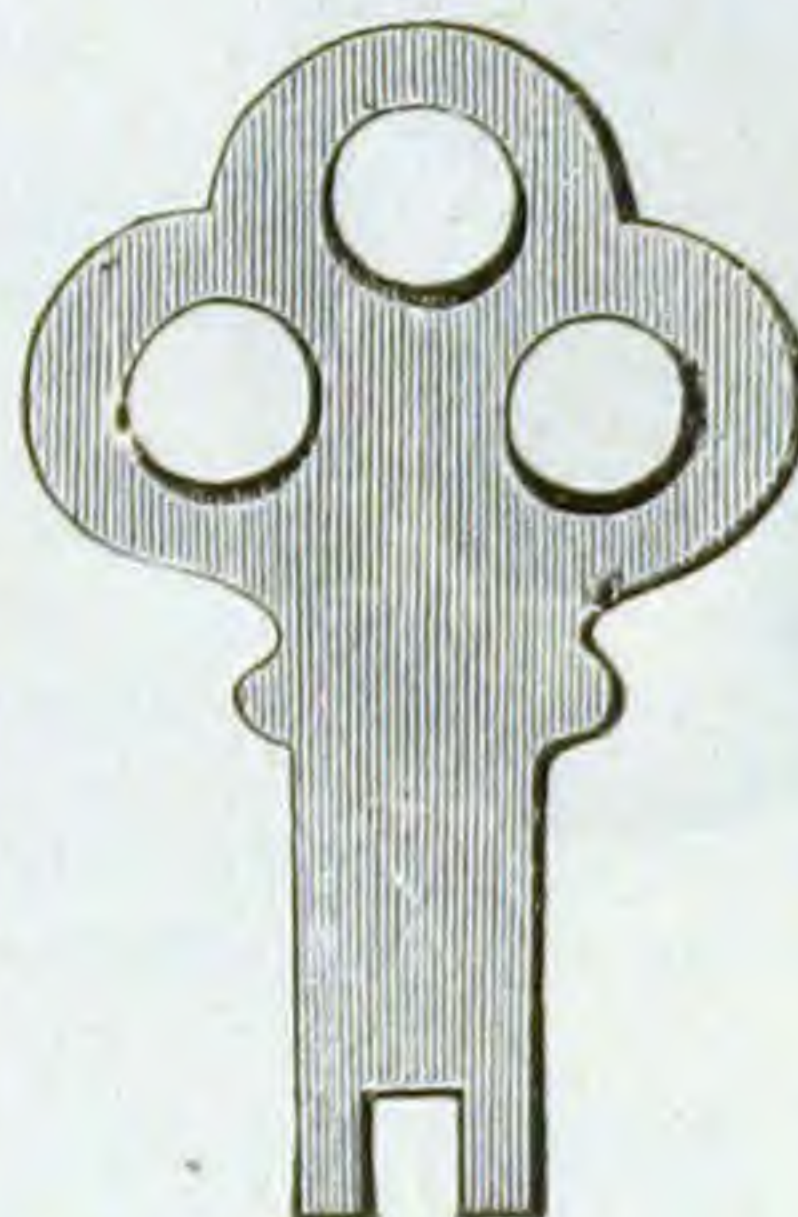
Chain and ring can be furnished to special finish where desired to match any finish or fixture.

Cat. No.	Price.
10278 5 Amperes, complete with 6 ft. chain and ring, each.....	\$1.50
10279 Extra Brass Chain, per ft. ....	.05
10280 Extra Brass Rings, each .....	.05





Cat. No. 10281.

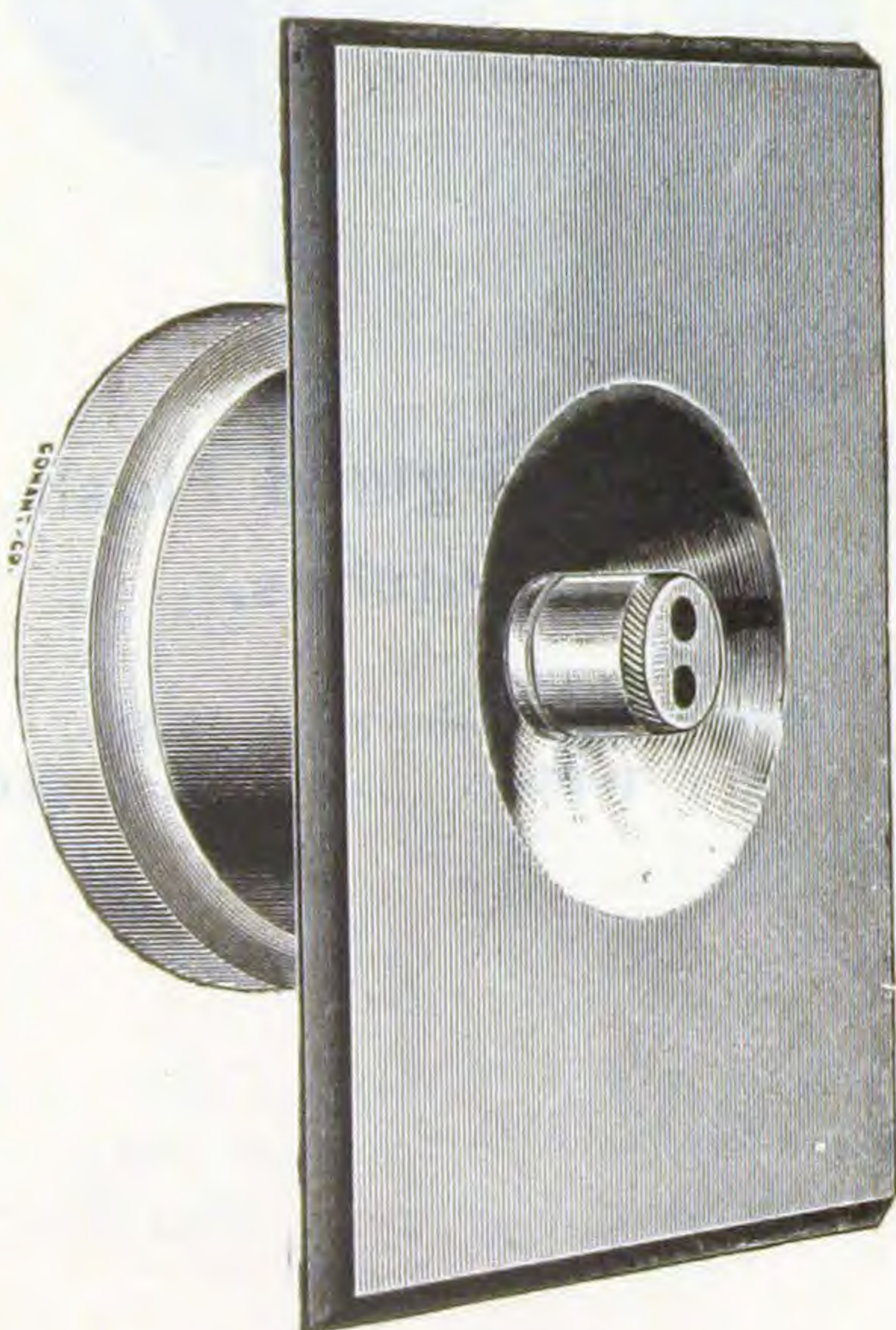


## Key Switches.

Patented Oct. 1, 1895.

Without the key it is impossible for anyone to tamper with the lights controlled by this switch. We fit any of our regular snap and flush switches with key attachment.

Cat. No.	Price.
10281	Key Attachment with Key.....\$0.36



Cat. No. 10282.

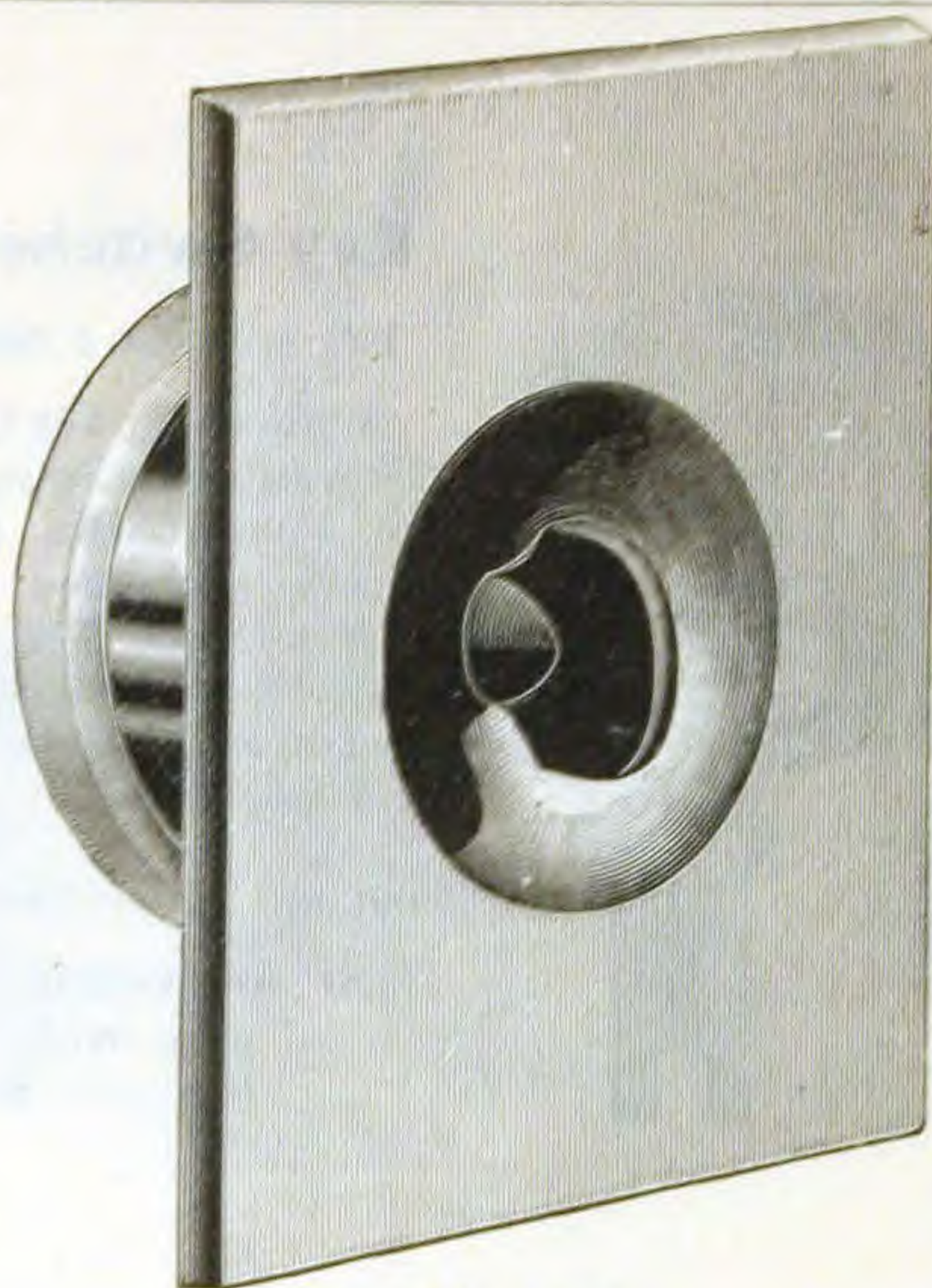
## Anchor Key Flush Switch.

The Anchor Key Flush Switch is especially adapted for use in insane asylums, prisons and other public institutions where it is desired to prevent tampering with the lights.

We fit any of our regular snap and flush switches with key attachment.

Cat. No.	Price.
10282	Key Attachment with Key.....\$0.36





Cat. No. 10283.

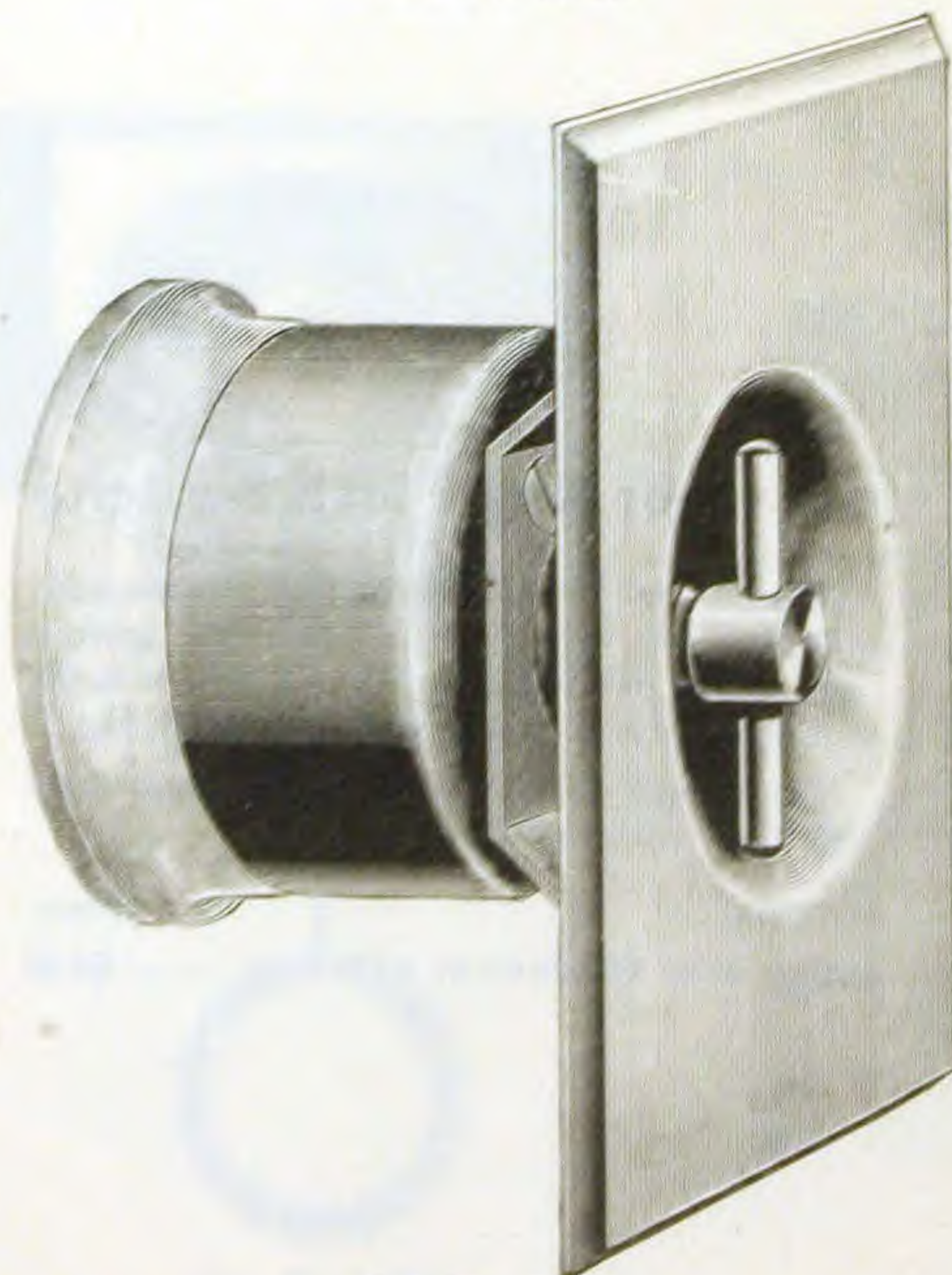
### Perkins Flush Switches.

Flush Switches, Single and Double-Pole.

Diam. of base,  $2\frac{1}{4}$  in.; length of plate,  $3\frac{3}{8}$  in.; width,  $2\frac{5}{8}$  in.

This switch is also made as three or four point, the price being the same as for D. P.

Cat. No.	Price.
10283 10 Amperes, D. P., Flush...	\$2.25
10284 10 " " with key	2.50
10285 10 " S. P.....	1.75



Cat. No. 10286.

### New England Flush Switches.

10286 N. E. Flush Switch, 10 Amperes.....	\$2.00
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### Anchor Flush Switches.

The Anchor Flush Plates are made of solid plates, one-eighth inch thick, which finish with a smooth surface without the "wrinkles" seen on the cheaper thin plates. The standard finish is nickel. We can furnish the plates in any finish, or to match any house hardware, from sample, at slight extra cost.

The handle is so designed as to be practically flush, and a spring beneath it makes the plate absolutely rigid. By simply loosening one screw the shell may be removed for wiring.

We make to order plates of any desired size, other than given, and for any number of switches.

In ordering use catalogue number of plate and specify the size of switch. When special finish is required, send a sample with order.

### PRICE SINGLE FLUSH SWITCHES.

Cat. No.		Price.
10287	5 Amperes, Single-Pole.....	\$0.93
10289	10     "                 "                 " .....	.99
10290	5     "                 500 Volt.....	1.26
10291	10     "                 "                 " .....	1.92
10292	10     "                 Three-Point.....	1.26
10293	10     "                 Four-Point.....	1.56
10294	10     "                 Electrolier.....	1.56
10295	10     "                 Double Pole.....	1.29
10296	20     "                 "                 " .....	1.66
10297	30     "                 "                 " .....	1.92

PRICES GANG PLATE ONLY.

Switches not included.

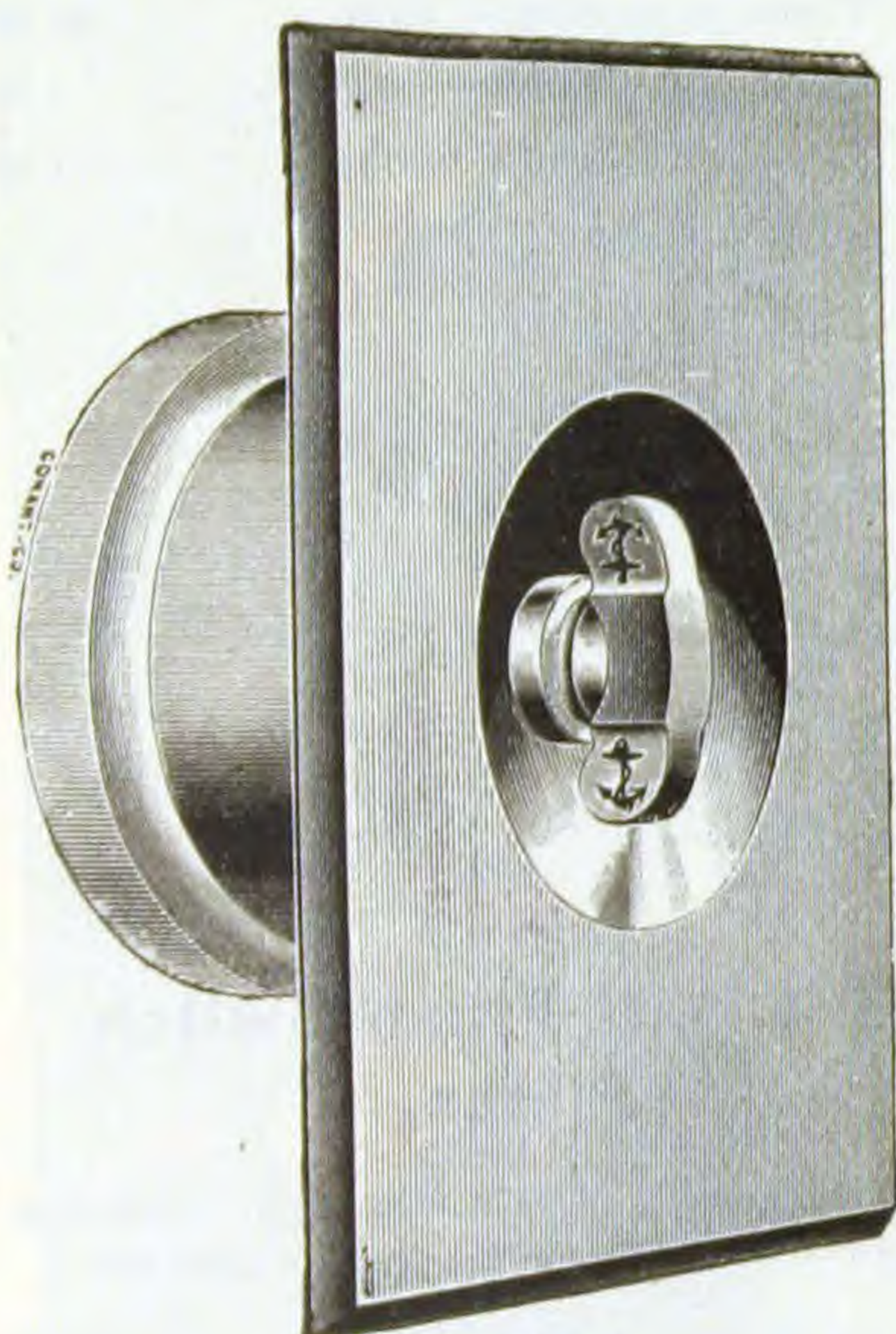
10298	Two Switch Flush Plate.....	2.10
10299	Three    "       "       " .....	3.30
10300	Four     "       "       " .....	4.20
10301	Six       "       "       " .....	5.40

Other sizes made to order. To obtain the net price of the plate and switches complete, add the net price of the plate to the net price of such switches as are desired.

DIMENSIONS GANG FLUSH PLATE.

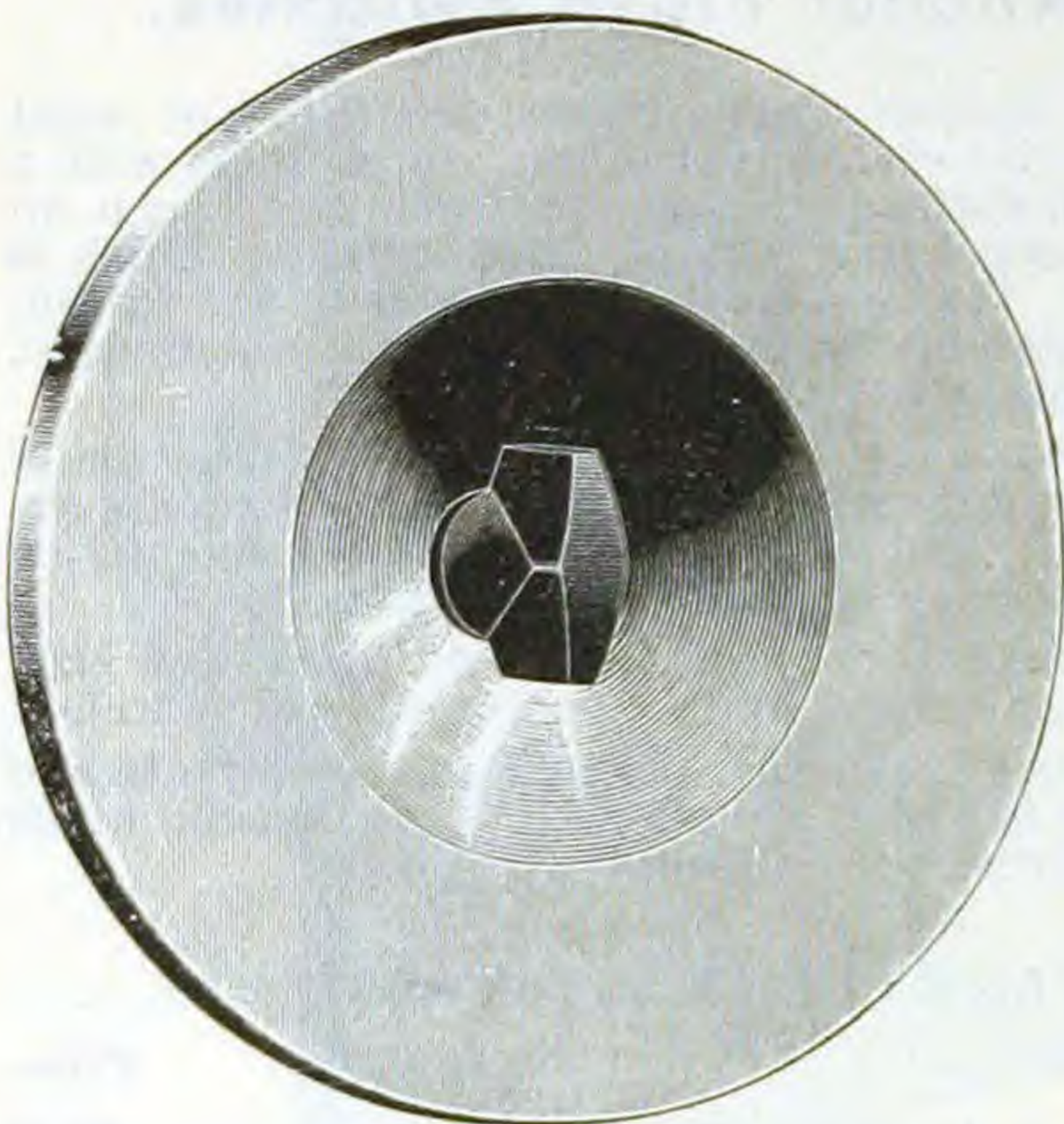
Number of Switches on plate..	2	3	4	6	8
Size Plate..	$3\frac{3}{4}$ X5 $\frac{1}{2}$	$3\frac{3}{4}$ X7 $\frac{7}{8}$	$3\frac{3}{4}$ X10	$3\frac{3}{4}$ X14 $\frac{3}{4}$	$3\frac{3}{4}$ X20

Dimensions Single Flush Plate  $3\frac{3}{4}$  x 3 inches.



Cat. No. 10289.





Cat. No. 10302.

### Hart Flush Switch Plates.

Diameter of Plate,  $2\frac{7}{8}$  inch.

Cat. No.	Price.
10302 Plate only, nickel, each.....	\$1.20
10303       "       bronze, each.....	1.20
10304       "       brass, each.....	1.20



Cat. No. 10305.

### No. 1 Hart Flush Switch Plates.

Length,  $3\frac{3}{8}$  inch. Width,  $2\frac{5}{8}$  inch. Opening required for Switch,  $2\frac{1}{4}$  inch. diameter.

10305 Plate only, nickel, each.....	\$1.20
10306       "       bronze, each.....	1.20
10307       "       brass, each.....	1.20

Length,  $4\frac{1}{8}$  inch. Width,  $3\frac{1}{8}$  inch.

10308 Plate only, nickel, each.....	\$1.50
10309       "       bronze, each.....	1.50
10310       "       brass, each.....	1.50

To obtain the net price of plate and switches complete, add the net price of plate to net price of such switches as are desired.



## HART FLUSH SWITCH PLATES.

### No. 2 Flush Plate.

Two Switches.

Cat. No.	Price.
10311 Plate only, nickel, each.....	\$3.00
10312       "       bronze, each .....	3.00
10313       "       brass, each....	3.00

### No. 3 Flush Plate.

Three Switches.

Length,  $9\frac{1}{4}$  inch. Width,  $3\frac{3}{8}$  inch.  
Opening required,  $7\frac{3}{8} \times 2\frac{1}{4}$  inch.

10314 Plate only, nickel, each.....	\$4.50
10315       "       bronze, each.....	4.50
10316       "       brass, each.....	4.50

To obtain the net price of plate and switches complete, add the net price of plate to net price of such switches as are desired.

Cat. No. 10311.



**HART FLUSH PLATES.****No. 4 Flush Plate.**

Four Switches.

Length,  $6\frac{3}{4}$  inch. Width, 6 inch. Opening required  $4\frac{7}{8} \times 4\frac{7}{8}$  inch.

Cat. No.		Price.
10317	Plate only, nickel, each.....	\$6.00
10318	" bronze, each.....	6.00
10319	" brass, each.....	6.00

**No. 6. Flush Plate.**

Six Switches.

Length,  $9\frac{5}{8}$  inch. Width, 6 inch. Opening required,  $7\frac{3}{4} \times 4\frac{7}{8}$  inch.

10320	Plate only, nickel, each.....	\$7.50
10321	" bronze, each.....	7.50
10322	" brass, each.....	7.50

**No. 8 Flush Plate.**

Eight Switches.

Length,  $11\frac{7}{8}$  inch. Width, 6 inch. Opening required,  $10 \times 4\frac{7}{8}$  inch.

10323	Plate only, nickel, each.....	\$9.00
10324	" bronze, each.....	9.00
10325	" brass, each.....	9.00

To obtain the net price of plate and switches complete, add the net price of plate to net price of such switches as are desired.



**C-S Switches.****Push Switches.**

Cat. No.		Price.
10326	Double-Pole, 15 Amperes.....	\$2.50
10327	Single-Pole, 10 " .....	2.00
10328	Three-wire Commutation, 10 Amp.....	2.50
10329	Four-wire Commutation, 5 Amp.....	4.00

Nickel or Polished Brass.

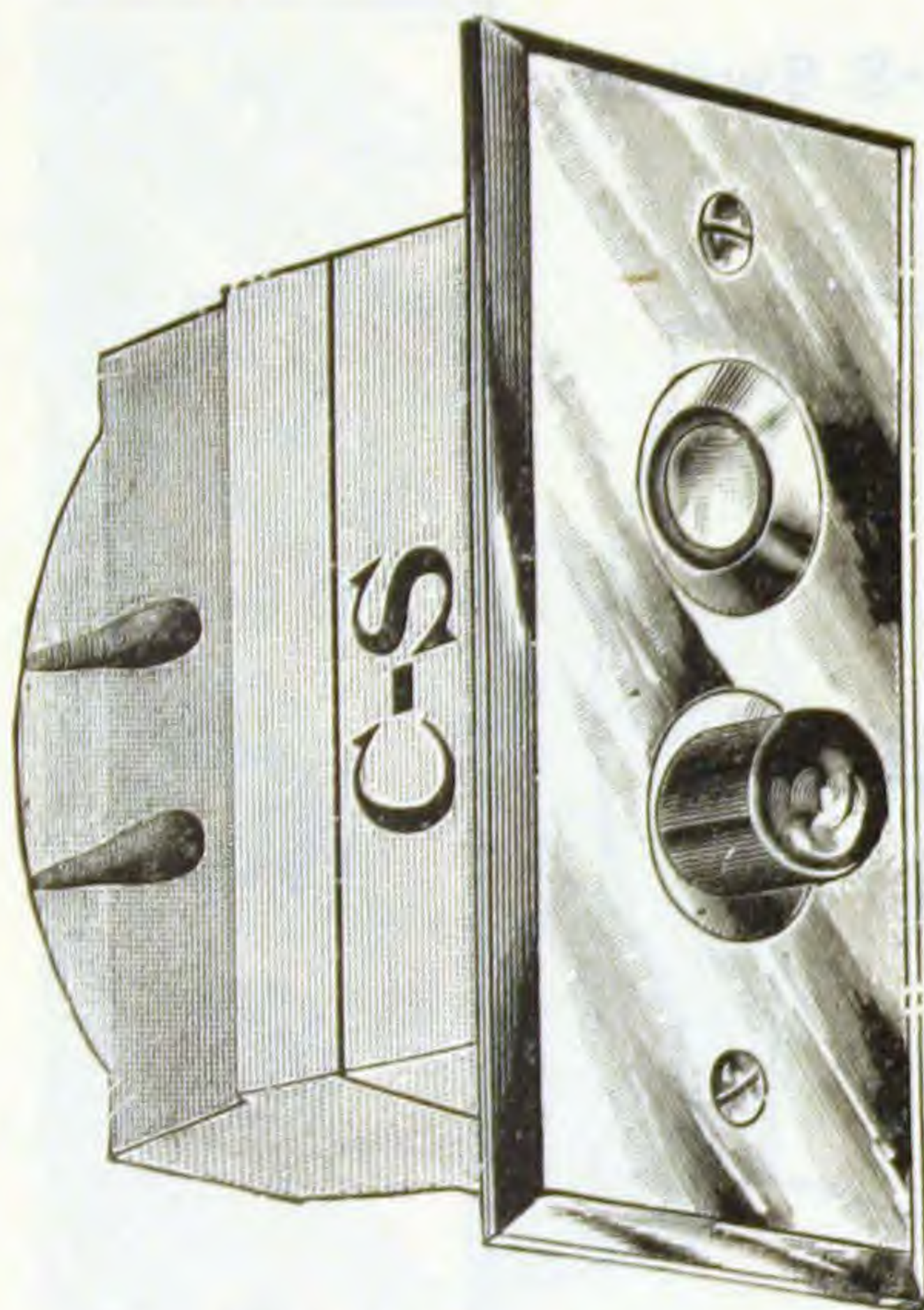
Special finishes to order.

**Gang Face Plates for Double Push Switch.**

A comparison between the cut of plate for a single switch and that of gang face plate for four switches will show that by using the gang plate a saving of wall space of about  $1\frac{5}{8} \times 3\frac{3}{4}$  is effected, besides presenting a better appearance than by placing four face plates side by side. In like manner, the gang face plate for six switches saves a wall space of  $2\frac{3}{8} \times 3\frac{3}{4}$ .

For switches complete, in gangs, up to six switches in gang, without iron boxes, same price as for same number singly.

Beyond 6 switches in gang, special.



Cat. No. 10326.

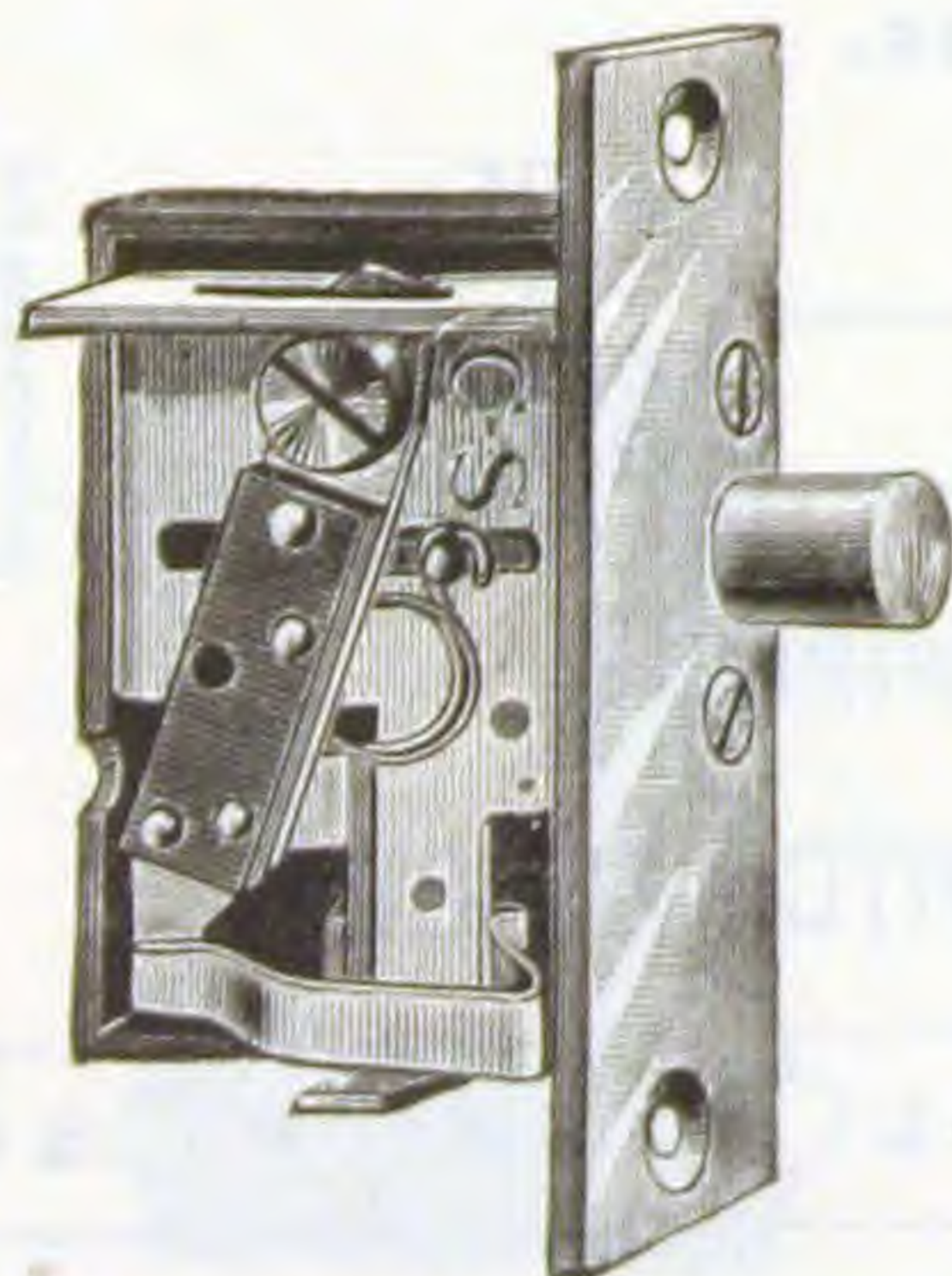
**Lock Switches.**

10330	Double-Pole, 15 Amperes.....	\$2.50
10331	Single-Pole, 10 " .....	2.00
10332	Three-wire Commutation, 10 Amp.....	2.50

**Automatic Switch.**

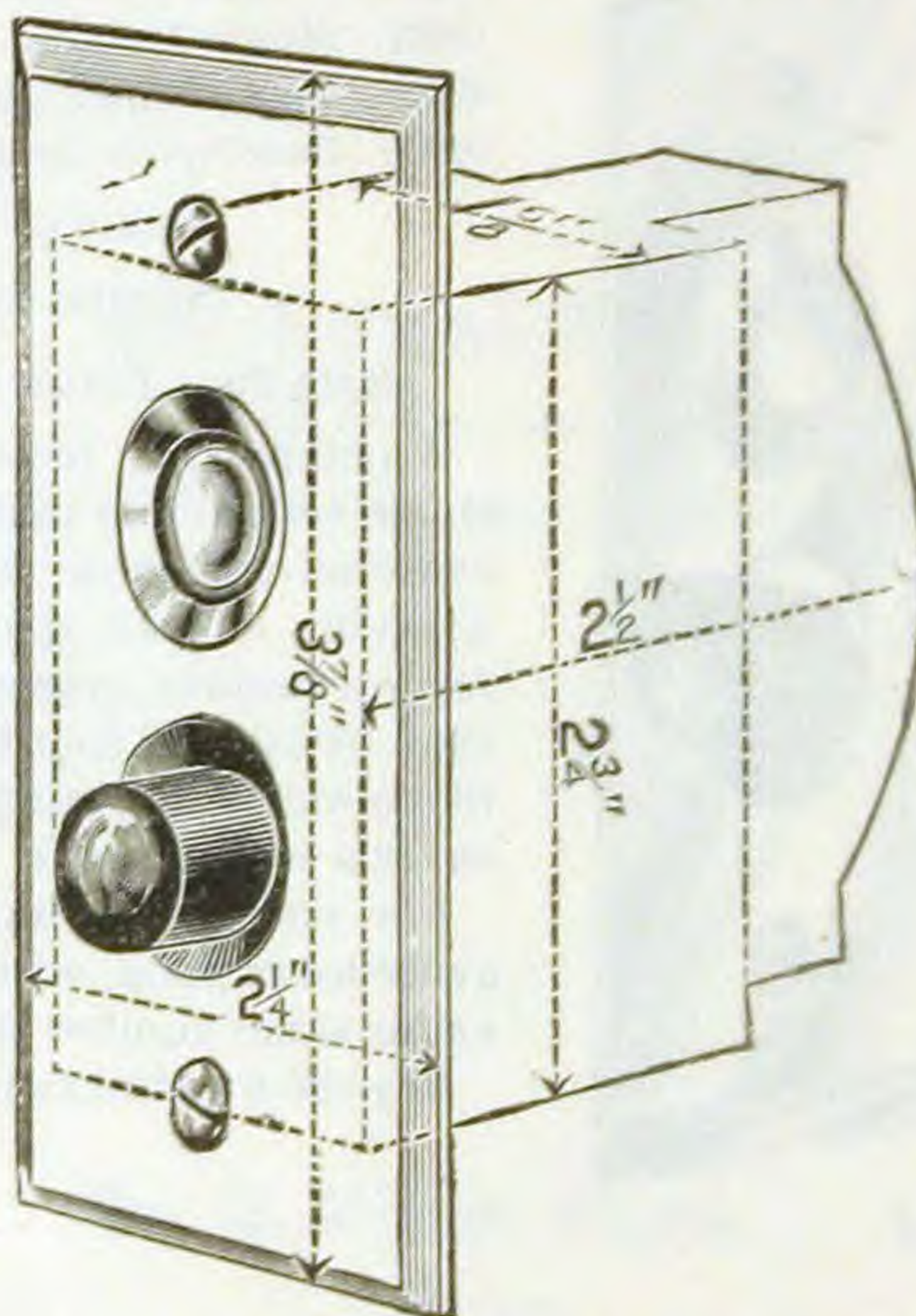
10333	5 Amperes, Single-Pole.....	\$2.00
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**SCHEME:** This switch is to be placed in the jamb of door. By reason of its construction, the opening of the door turns on the light and the closing turns off the light, or vice versa.

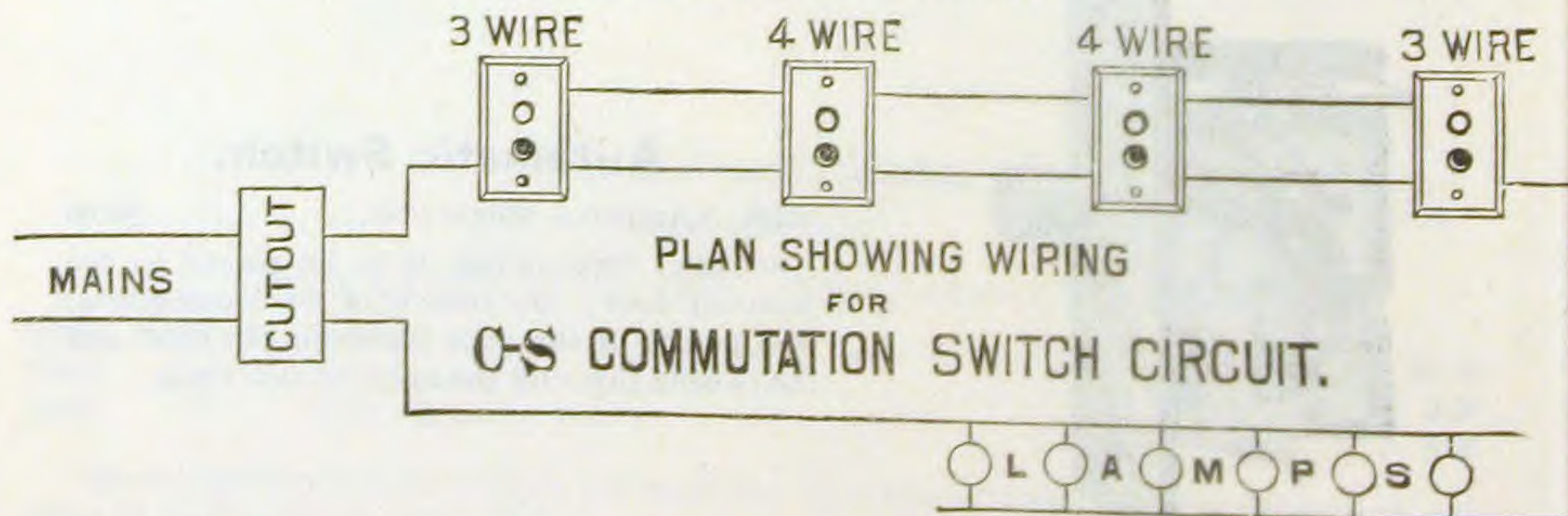


Cat. No. 10333.



**C-S SWITCHES.****Dimensions of C-S Switch.**

Single-Pole, Double-Pole, 3-Wire and 4-Wire—All same size.

**Sketch of 3-Wire and 4-Wire Commutation Switch Connections.**

All successive stations should be supplied with 4-Wire Commutation Switches.



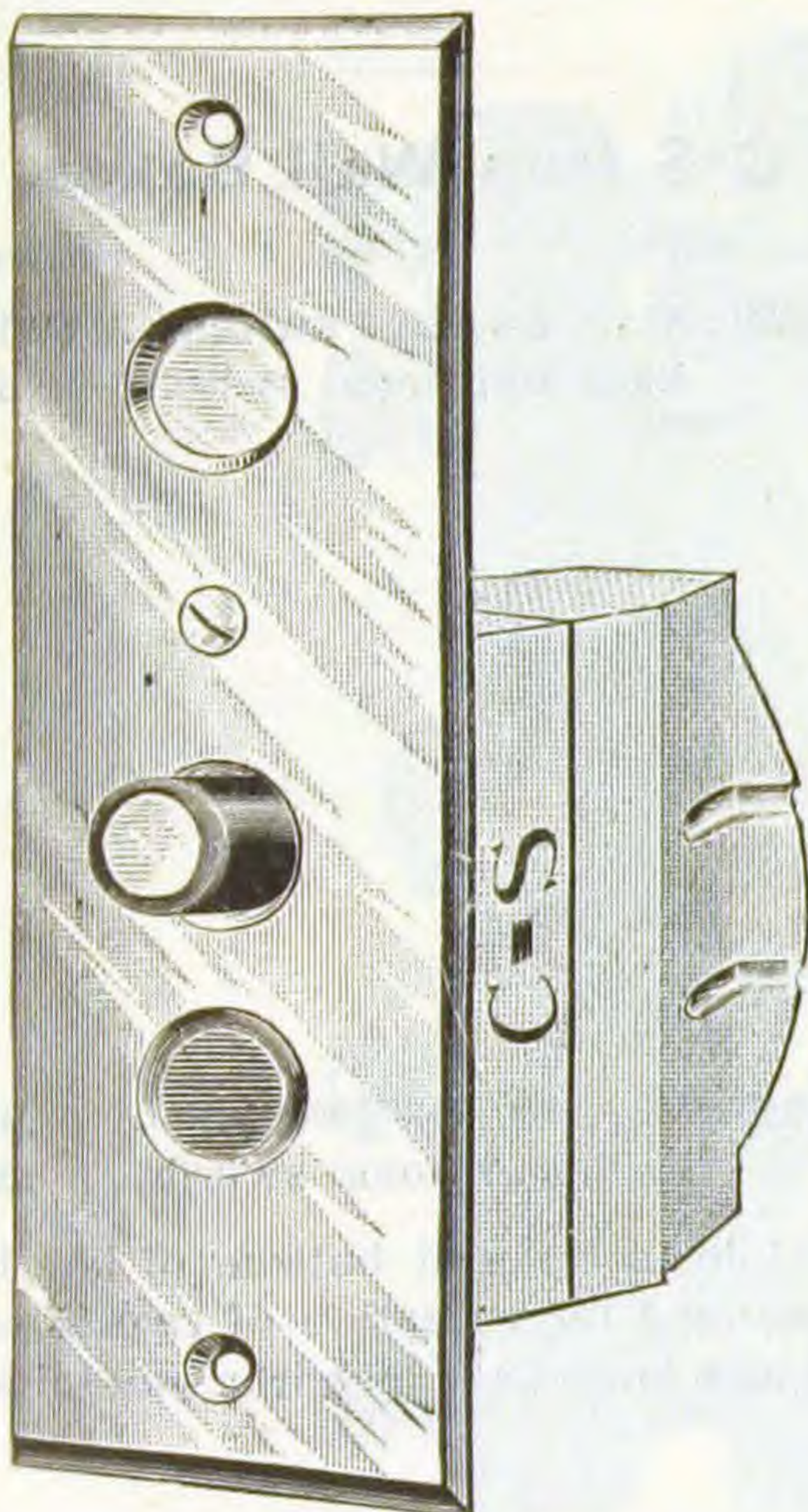
**C-S SPECIALTIES.****C-S Special Plates.**

In addition to switch plate made as:

Cat. No.	Price.
10334 1 Bell Button.....	\$0.60
10335 2 Bell Buttons. . . . .	.90
10336 1 Gas-Lighting Key.....	.90

Bell buttons and gas-lighting keys have blind attachment to back of plate, so that the only screws exposed are those required to secure plate in position, giving it a very neat appearance.

Any combination desired can be furnished.



Cat. No. 10334.

**C-S Switch Accessories.**

Made in any style or finish of wood.

Furnished in the common woods, oak, ash, cherry, etc.

10337 For 1 switch.....	\$0.30
Each additional switch.....	.15

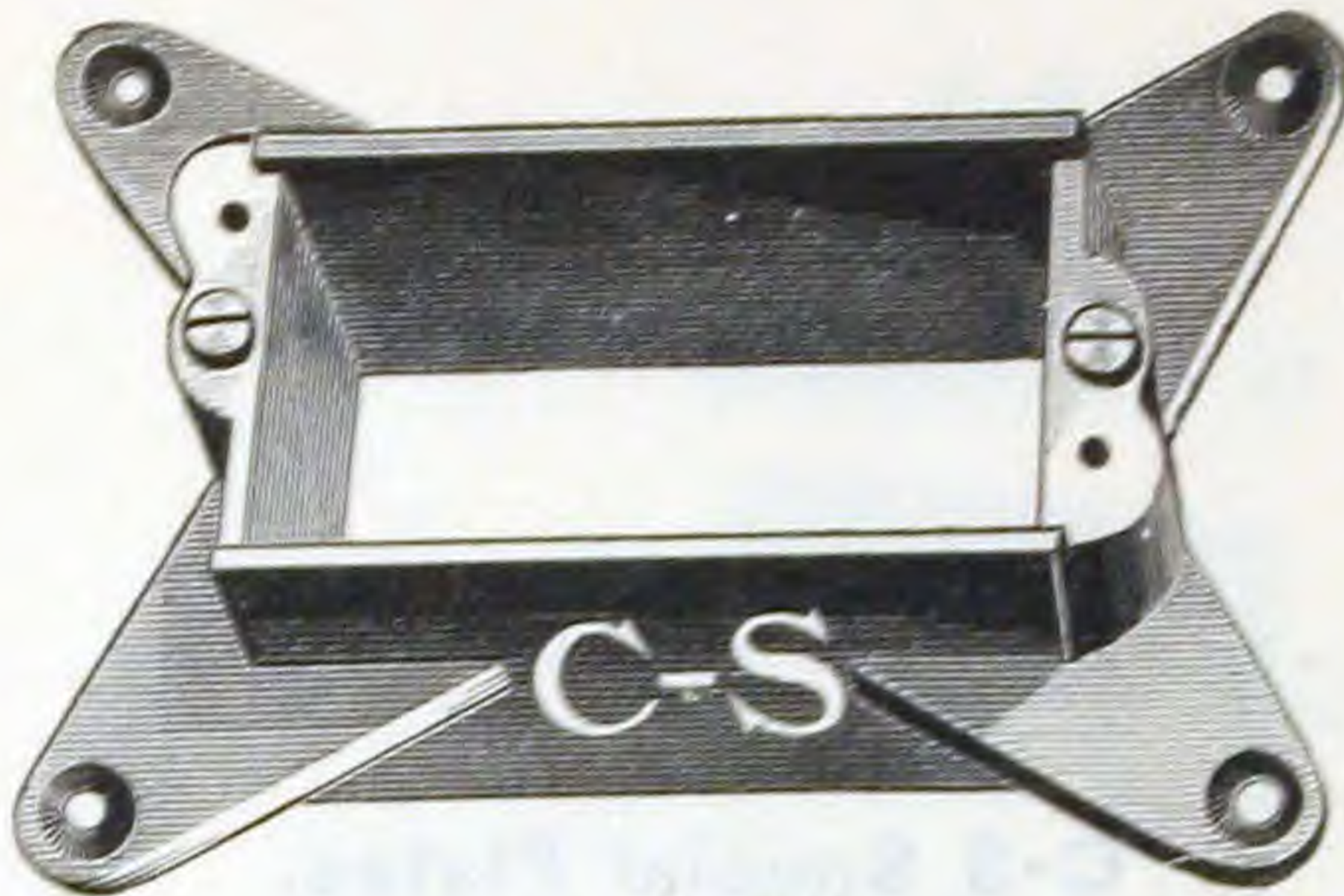
Furnished in the rare woods, such as mahogany, rosewood, ebony, boxwood, white enamel, etc.

10338 For 1 switch.....	\$0.50
Each additional switch.....	.25



Cat. No. 10337.





Cat. No. 10339.

Standard Iron Wall Box. Style 200.

**C-S WALL BOXES.****C-S Iron Wall Boxes.**

Cat. No.	Price.
10339 Style 200, for 1 switch.....	\$0.15
Each additional switch...	.12

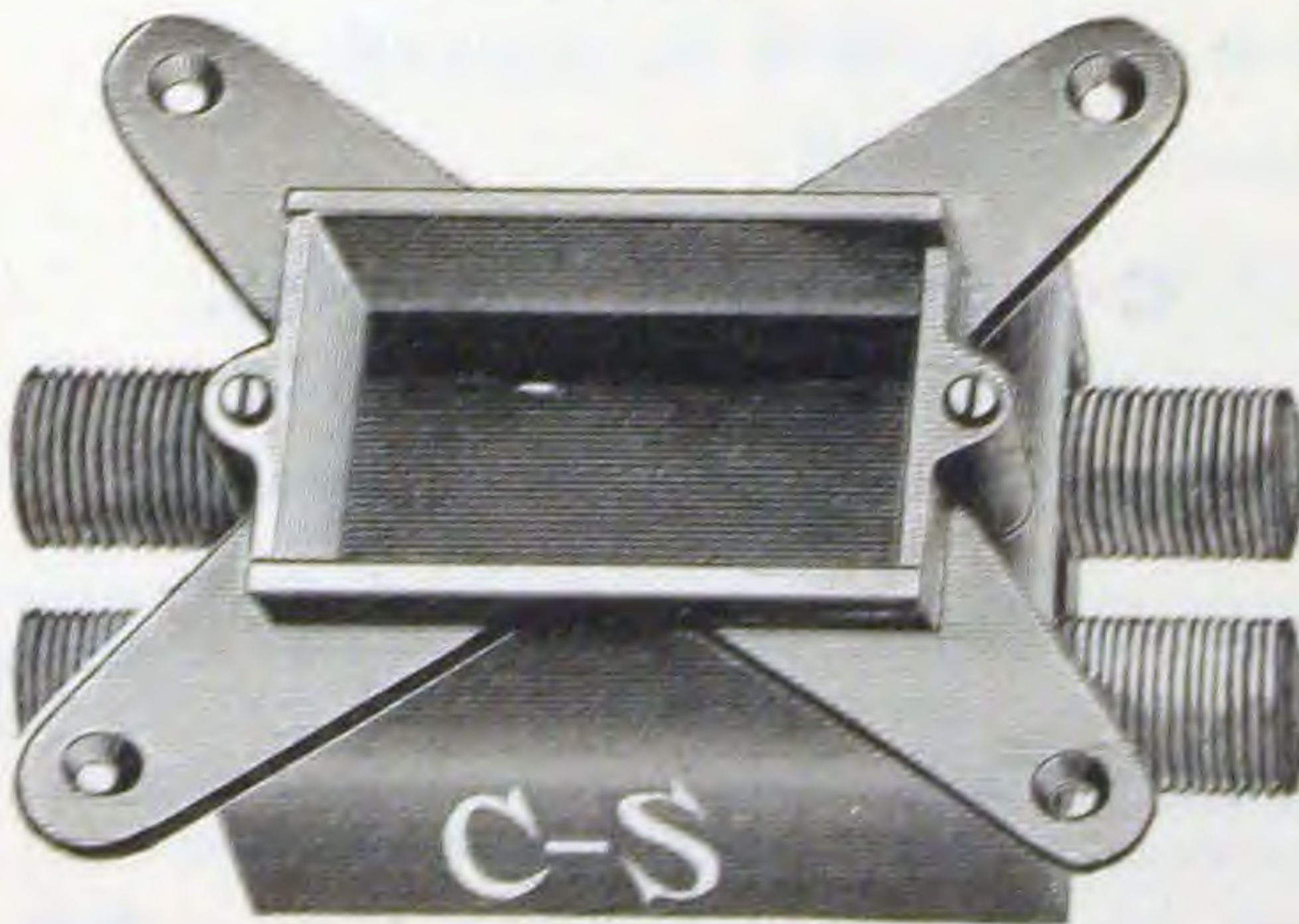


Cat. No. 10340.

Iron Wall Box, without nipples, for interior conduit.  
Style 300.

10340 Style 300, for 1 switch. ..	.45
Each additional switch...	.36

Hole in top and bottom of box is arranged for reception of two  $\frac{3}{8}$  or  $\frac{1}{2}$  inch brass or  $\frac{3}{8}$  inch iron conduits.



Cat. No. 10341.

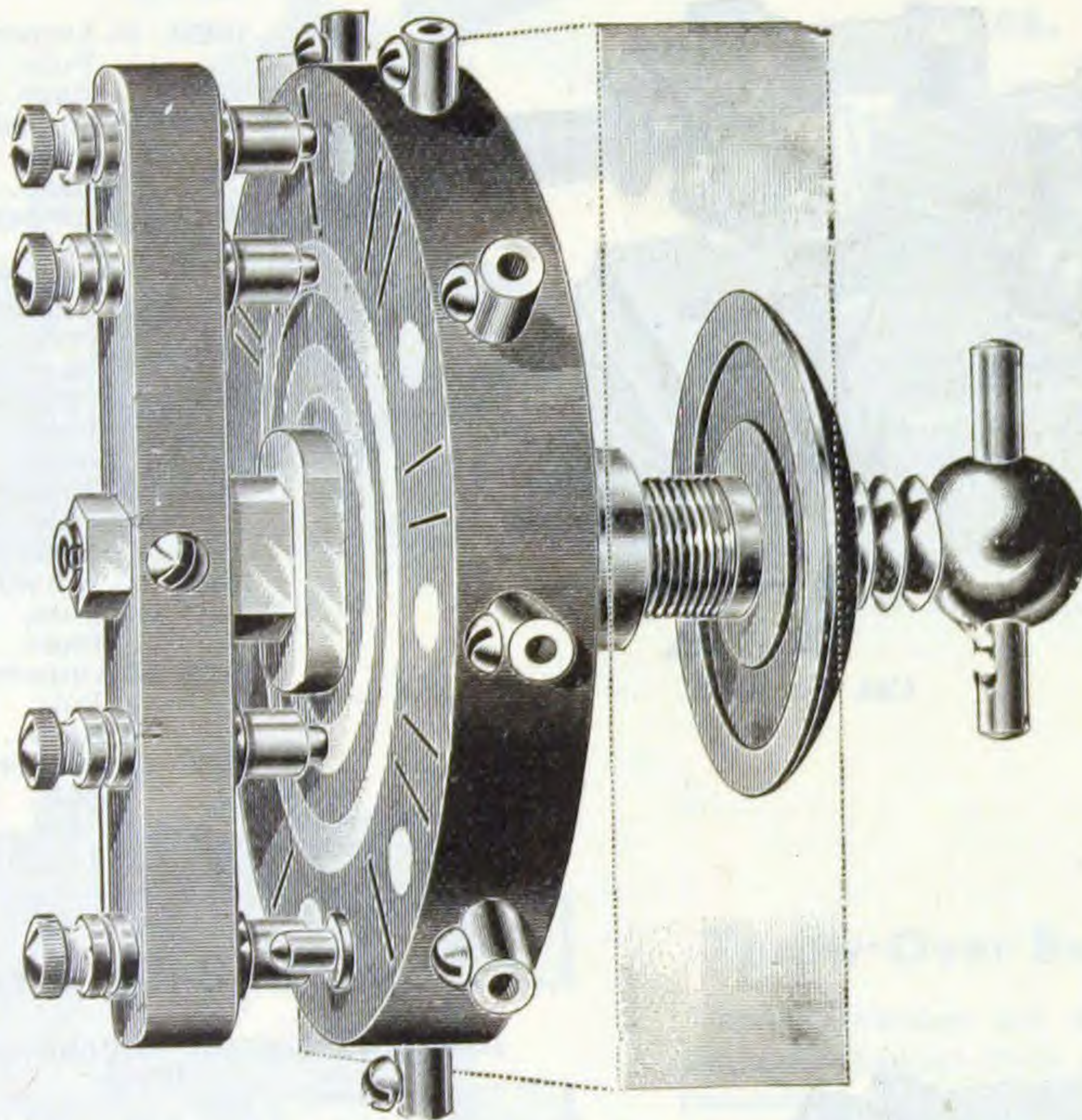
Iron Wall Box, with nipples, for interior conduit.  
Style 400.

10341 Style 400, for 1 switch.....	\$0.75
Each additional switch...	.50

Box fitted with nipples for  $\frac{3}{8}$  inch iron conduit, or, if preferred, tapped for that size tube.



### Voltmeter Switch.

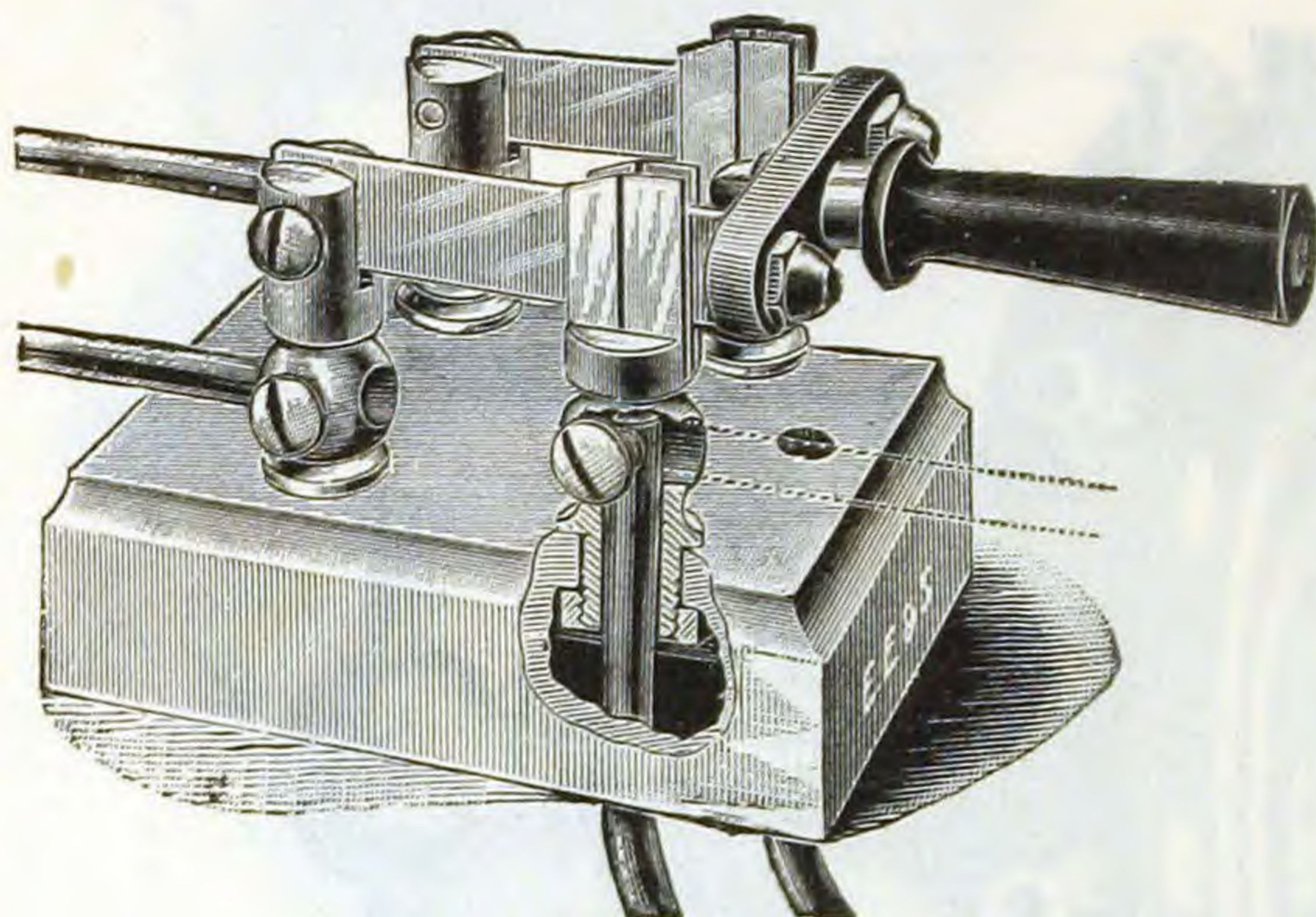


Cat. No. 10343. IMPROVED VOLTMETER SWITCH.

Made of the best insulating material. Readings may be taken at any time, as the Voltmeter is always connected, although it need not be left in circuit. Any circuit may be connected to Voltmeter instantly by slight turn of the handle, which carries a pointer indicating on a graduated dial (which can be numbered or lettered for convenience) which circuit is in contact. Contacts and connections all on the back of the slab. Current cannot be reversed through the Voltmeter.

Cat. No.						Price.
10342	6 Point,	3 Circuit,	on Slate			\$12.75
10343	8	4	"	"	"	12.75
10344	10	5	"	"	"	14.00
10345	12	6	"	"	"	15.50
10346	14	7	"	"	"	15.50
10347	16	8	"	"	"	17.85
10348	18	9	"	"	"	17.85
10349	20	10	"	"	"	17.85
10350	22	11	"	"	"	20.40
10351	24	12	"	"	"	20.40





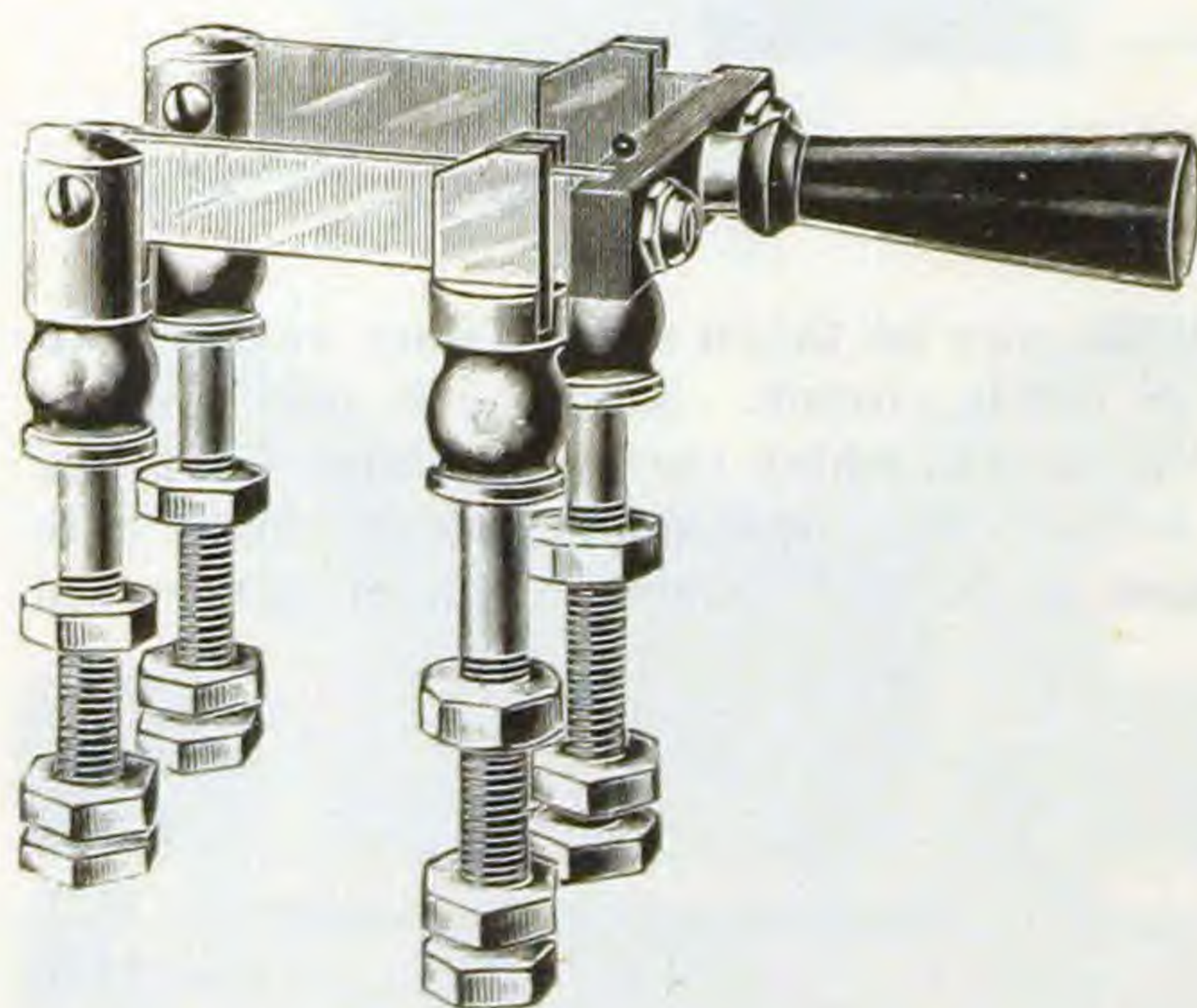
Cat. No. 10353.

### Baby Knife Switches.

Cat. No.		Price.
10352	15 Amperes, Single-Pole, Porcelain Base.....	\$0.55
10353	15 Amperes, Double-Pole, Porcelain Base.....	.70
10354	15 Amperes, Three-Pole, Porcelain Base.....	1.30
10355	25 Amperes, Single-Pole, Porcelain Base.....	.70
10356	25 Amperes, Double-Pole, Porcelain Base.....	.80
10357	25 Amperes, Three-Pole, Porcelain Base.....	1.50
10358	50 Amperes, Single-Pole, Pol. Slate Base.....	2.00
10359	50 Amperes, Double-Pole, Pol. Slate Base.....	2.50
10360	50 Amperes, Three-Pole, Pol. Slate Base.....	3.75

### Special Baby Switches.

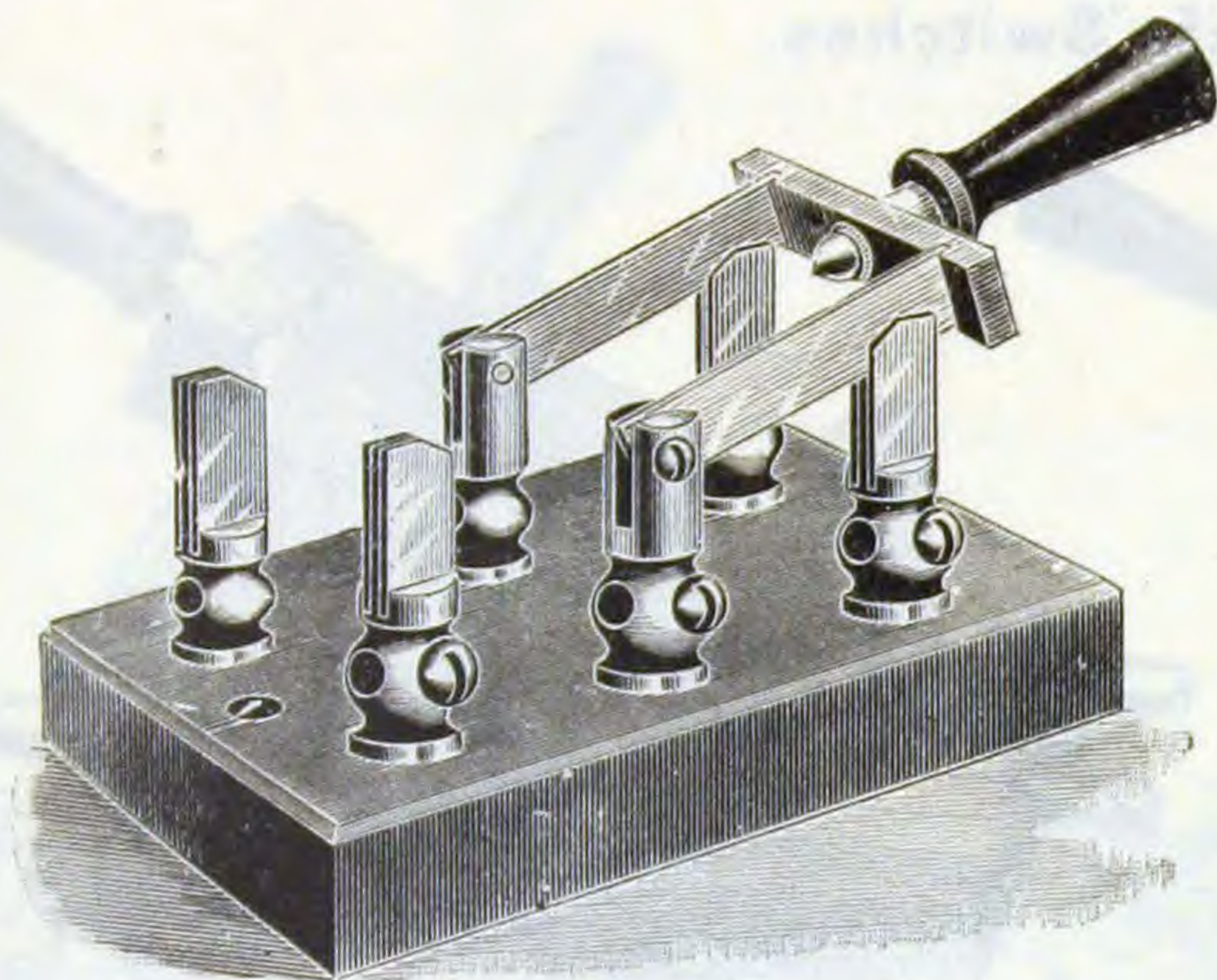
Baby Switches for Switchboard and Panel Work.



Cat. No. 10362.

Cat. No.		With Fuse Terminals.	Without Fuse Terminals.
10361	Single-Pole, Single Throw, 15 Amperes.....	\$1.15	\$0.75
10362	Double-Pole, Single Throw, 15 Amperes.....	2.00	1.30
10363	Triple-Pole, Single Throw, 15 Amperes.....	2.80	1.85
10364	Single-Pole, Double Throw, 15 Amperes.....	1.65	1.10
10365	Double-Pole, Double Throw, 15 Amperes.....	3.00	2.00
10366	Triple-Pole, Double Throw, 15 Amperes.....	4.50	3.00
10367	Single-Pole, Single Throw, 25 Amperes.....	1.50	.95
10368	Double-Pole, Single Throw, 25 Amperes.....	2.50	1.65
10369	Triple-Pole, Single Throw, 25 Amperes.....	3.50	2.35
10370	Single-Pole, Double Throw, 25 Amperes.....	2.10	1.40
10371	Double-Pole, Double Throw, 25 Amperes.....	3.75	2.50
10372	Triple-Pole, Double Throw, 25 Amperes.....	5.50	3.60

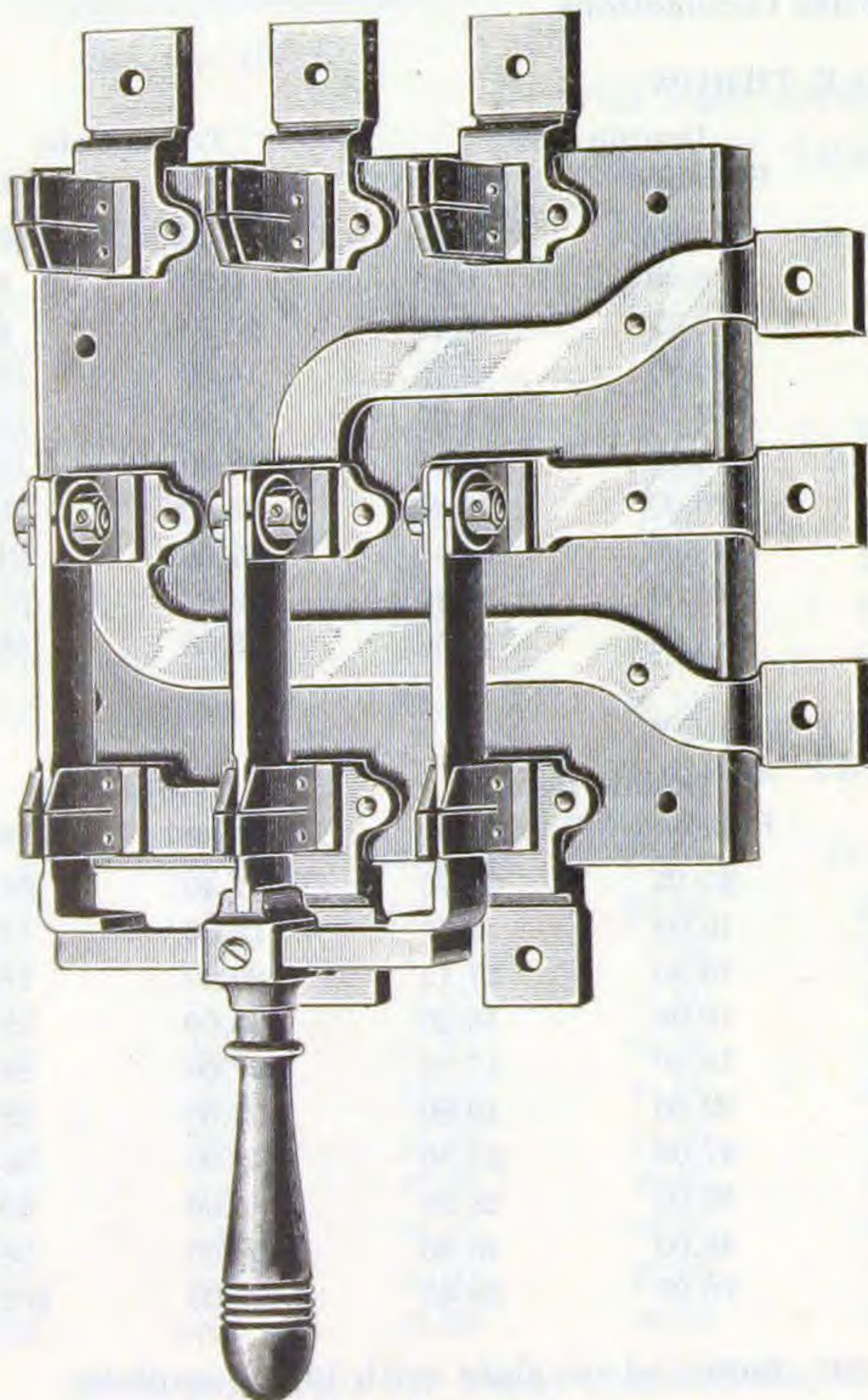




Cat. No. 10374.

### Double Throw Baby Switches on Slate Bases.

Cat. No.		With Fuse	Without Fuse
		Terminals. Price.	Terminals. Price.
10373	Single-Pole, Double Throw, 15 Amp....	\$1.50	\$1.00
10374	Double-Pole, Double Throw, 15 Amp....	2.75	1.80
10375	Triple-Pole, Double Throw, 15 Amp....	4.00	2.60
10376	Single-Pole, Double Throw, 25 Amp....	1.90	1.25
10377	Double-Pole, Double Throw, 25 Amp ..	3.40	2.25
10378	Triple-Pole, Double Throw, 25 Amp....	4.85	3.25



Cat. No. 10379.

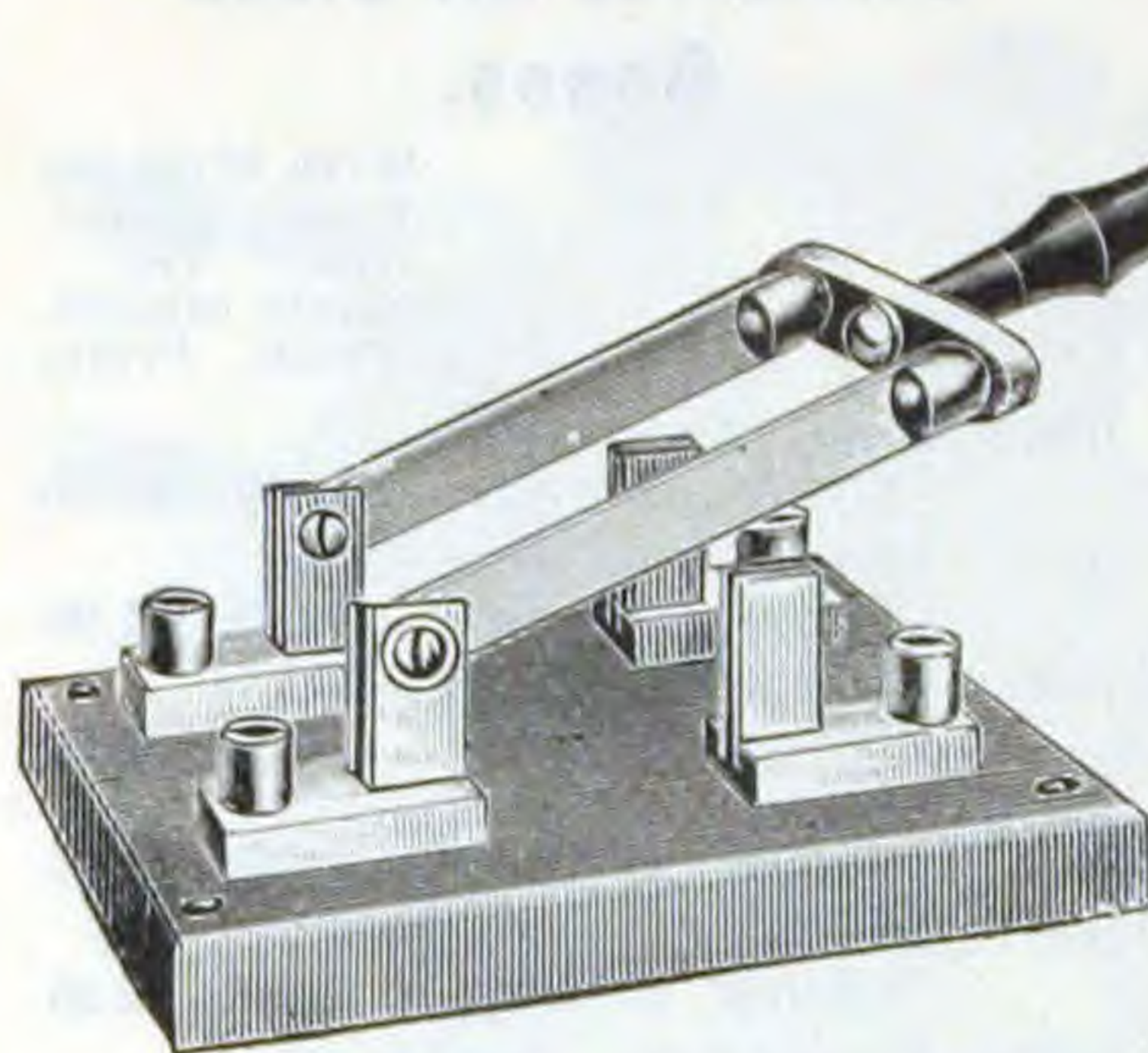
### Throw-Over Switches.

These Switches are designed for changing the load from a three to a two-wire system. They are used in isolated plants for connecting with the city three-wire lines during light load. They are also used in three-wire installations for throwing the load all on one machine during light load or repairs.

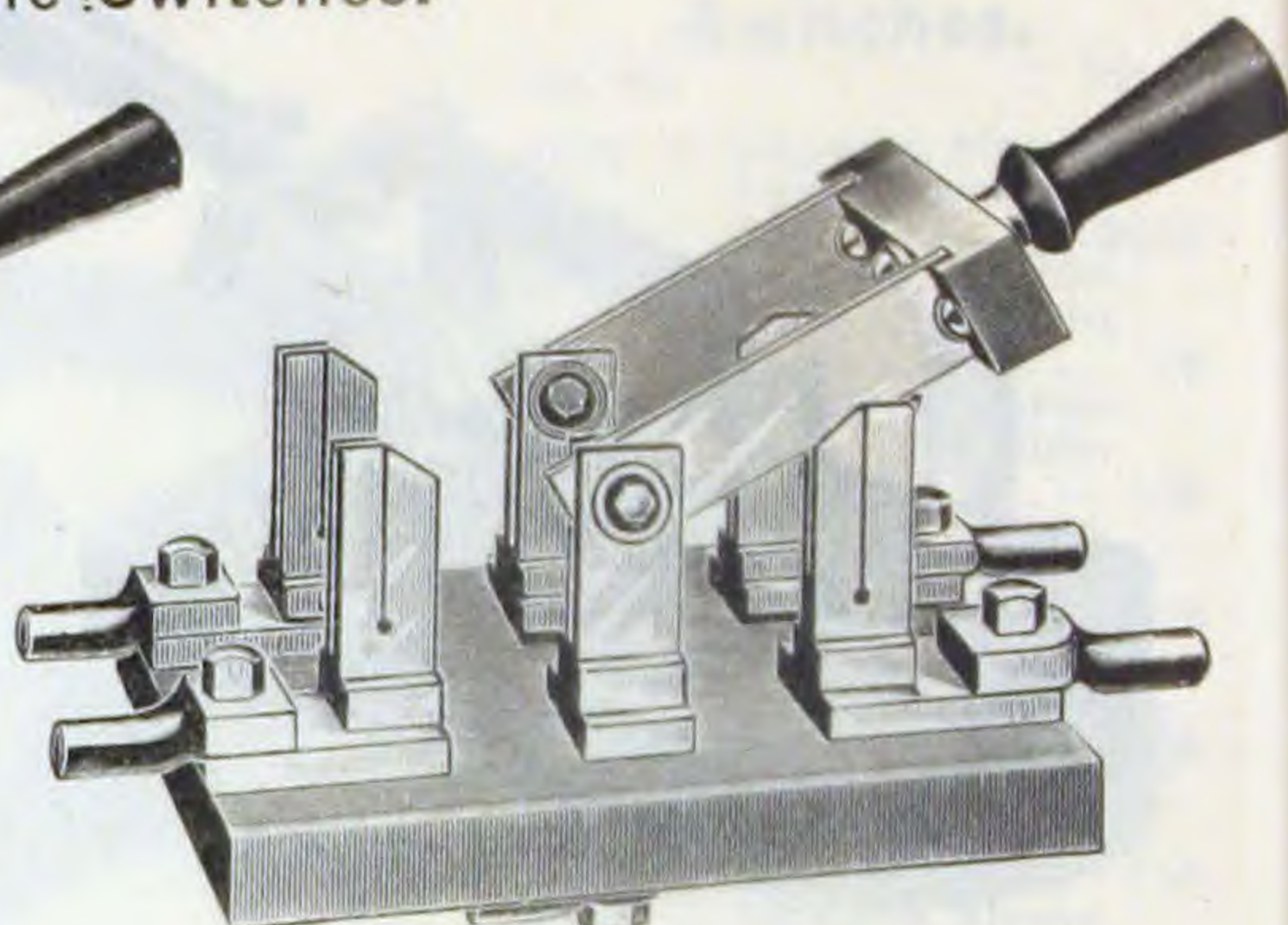
Cat. No.	Price.
10379	Throw-Over Switch, 3 to 2-wire, cap. 100 Amp....\$25.00
10380	Throw-Over Switch, 3 to 2-wire, cap. 250 Amp.... 50.00
10381	Throw-Over Switch, 3 to 2-wire, cap. 400 Amp.... 65.00
10382	Throw-Over Switch, 3 to 2-wire, cap, 600 Amp .. 80.00



## Knife Switches.



Cat. No. 10383.



Cat. No. 10393.

Without Fuse Connections.

## SINGLE THROW.

Cat. No.	Amperes Capacity.	Single Pole.		Double Pole.		Triple Pole.	
		Polished.	Plain.	Polished.	Plain.	Polished.	Plain
10383	25	\$1.75	\$1.60	\$3.20	\$2.90	\$4.30	\$3.90
10384	50	4.00	3.60	6.80	6.15	9.50	8.55
10385	75	4.50	4.05	8.25	7.45	10.70	9.65
10386	100	6.00	5.40	10.80	9.75	14.00	12.60
10387	150	7.20	6.50	12.75	11.60	17.00	15.30
10388	200	8.00	7.20	13.40	12.05	18.00	16.20
10389	300	9.50	8.55	16.00	14.40	23.00	20.70
10390	400	11.20	10.10	19.00	17.10	27.00	24.30
10391	600	15.50	13.95	26.00	23.40	39.00	35.10
10392	1000	25.00	22.50	45.00	40.50	63.00	56.70

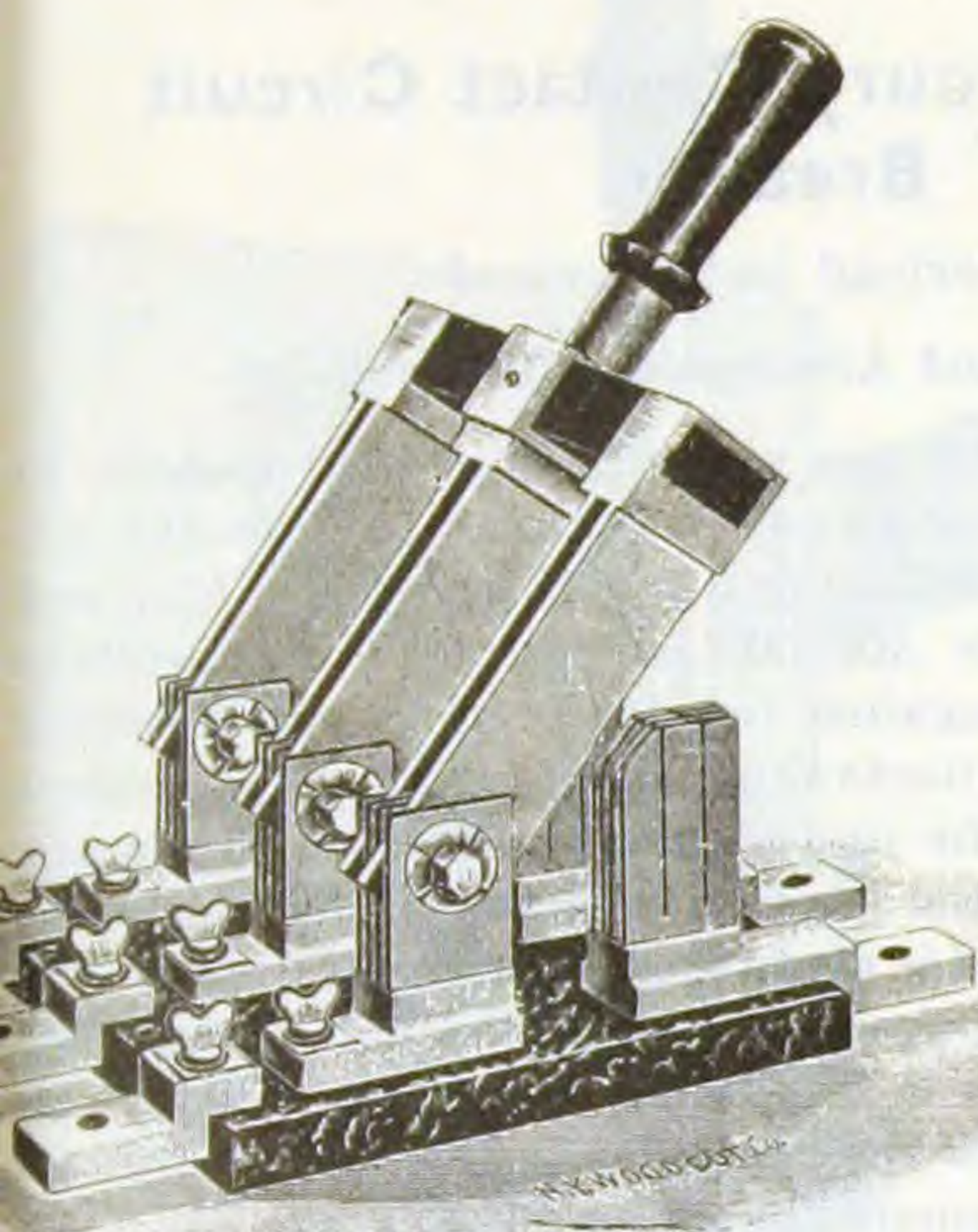
## DOUBLE THROW.

Cat. No.	Amperes Capacity.	Single Pole.		Double Pole.		Triple Pole.	
		Polished.	Plain.	Polished.	Plain.	Polished.	Plain.
10393	25	\$3.00	\$2.40	\$5.25	\$4.75	\$7.40	\$6.65
10394	50	6.20	5.60	10.60	9.55	15.00	13.50
10395	75	7.00	6.30	13.50	11.15	20.00	18.00
10396	100	10.00	9.00	18.00	16.20	25.00	22.50
10397	150	10.75	9.70	19.50	17.55	27.00	24.30
10398	200	12.00	10.80	22.00	19.80	32.00	28.80
10399	300	15.00	13.50	27.00	24.30	40.00	36.00
10400	400	18.00	16.20	32.00	28.80	45.00	40.50
10401	600	26.50	23.85	45.00	40.50	65.00	58.50
10402	1000	40.00	36.00	76.00	68.40	120.00	108.00

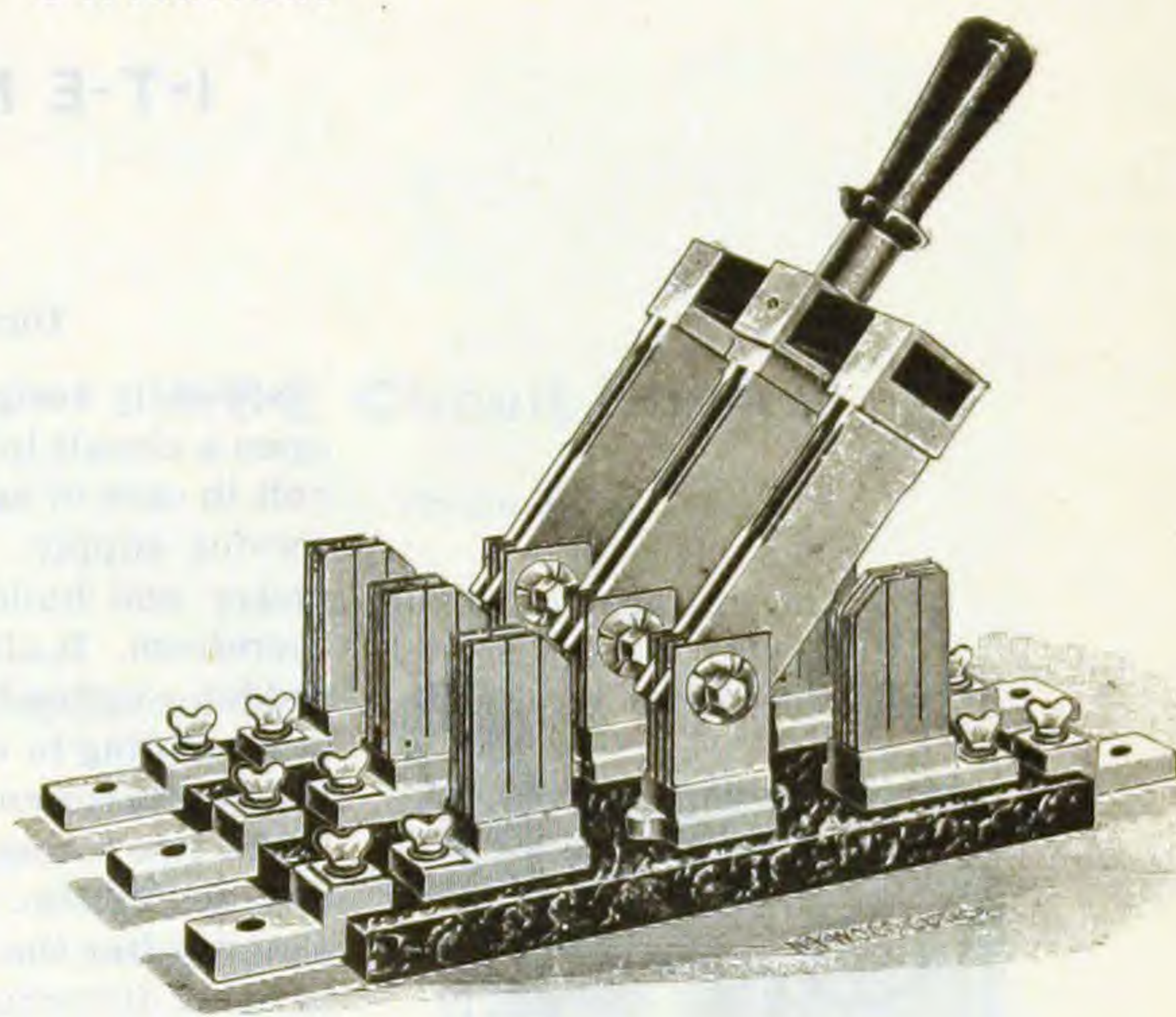
These prices are for Front Connections, mounted on slate with lugs complete.  
For Back Connections, on Wood Templates, add 20 per cent.



## Knife Switches.



Cat. No. 10412.



Cat. No. 10422.

With Fuse Connections.

## SINGLE THROW.

Cat. No.	Amperes Capacity.	Single Pole.		Double Pole.		Triple Pole.	
		Polished.	Plain.	Polished.	Plain.	Polished.	Plain.
10403	25	\$1.95	\$1.75	\$3.50	\$3.15	\$4.75	\$4.40
10404	50	4.50	4.05	7.50	6.75	10.50	8.45
10405	75	5.00	4.50	9.20	8.30	11.75	10.60
10406	100	6.00	5.40	12.00	10.80	15.50	13.95
10407	150	8.00	7.20	13.75	12.60	19.00	17.10
10408	200	9.00	8.10	15.00	13.50	20.00	18.00
10409	300	10.50	9.45	17.75	16.00	25.50	22.95
10410	400	12.00	10.80	21.00	18.90	30.00	27.00
10411	600	17.00	15.30	28.50	26.65	42.00	37.80
10412	1000	29.50	26.55	50.00	45.00	70.00	63.00

## DOUBLE THROW.

Cat. No.	Amperes Capacity.	Single Pole.		Double Pole.		Triple Pole.	
		Polished.	Plain.	Polished.	Plain.	Polished.	Plain.
10413	25	\$3.40	\$3.05	\$5.80	\$5.25	\$8.25	\$7.45
10414	50	7.00	6.30	12.00	10.80	17.00	15.30
10415	75	7.75	7.60	15.00	13.50	22.50	20.25
10416	100	11.50	10.35	20.50	18.45	28.00	25.20
10417	150	12.25	11.05	22.00	19.80	30.00	27.00
10418	200	13.50	12.50	25.00	22.50	36.00	32.40
10419	300	17.00	15.30	30.00	27.00	46.00	42.40
10420	400	21.00	19.90	36.00	32.40	52.00	46.80
10421	600	30.00	27.00	50.00	45.00	73.00	65.70
10422	1000	45.00	40.50	87.00	78.30	135.00	121.50

These prices are for Front Connections, mounted on slate with lugs complete.  
For Back Connections, on wood templates, add 20 per cent.



## I-T-E Mercury Contact Circuit Breaker.

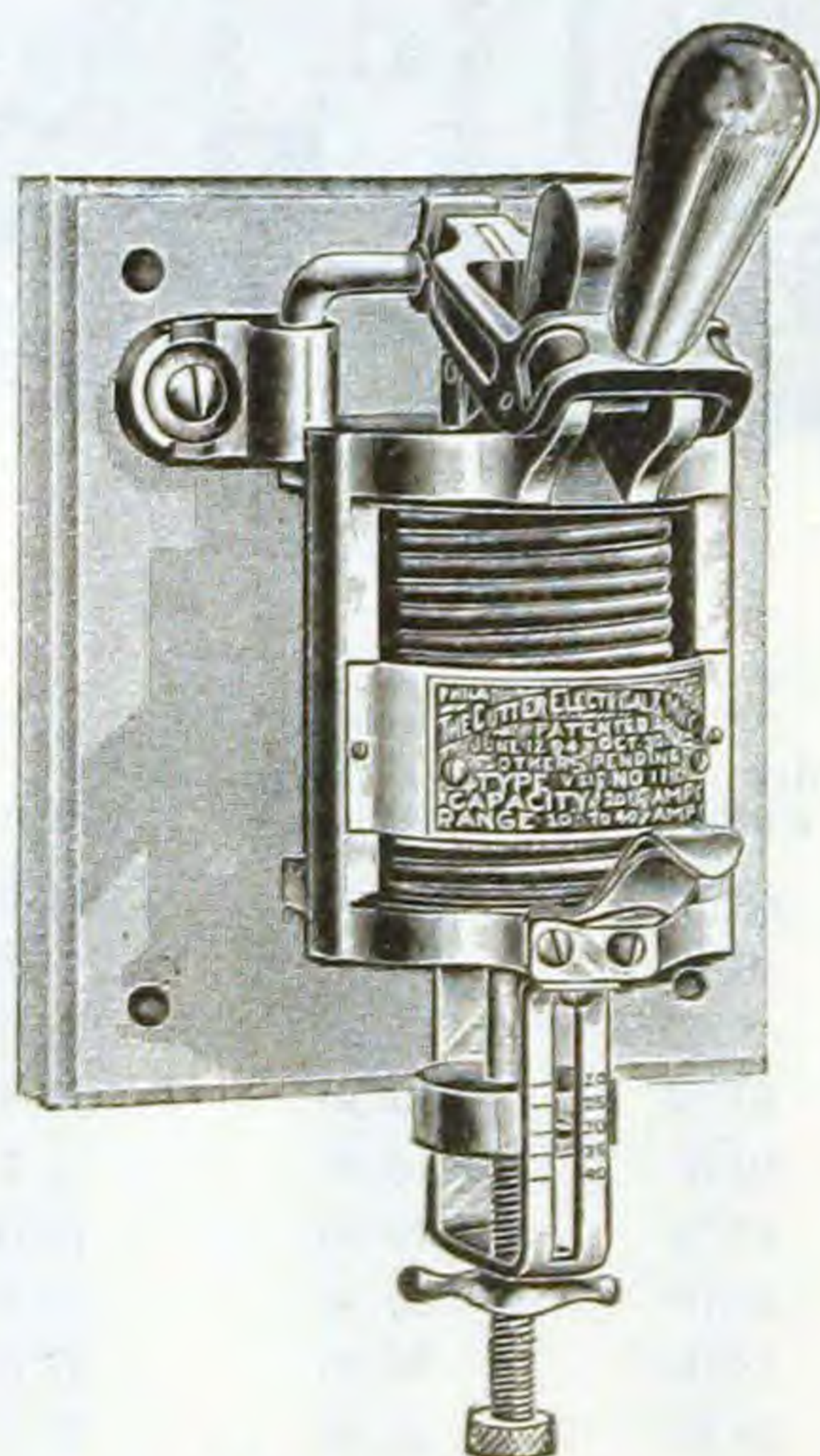
Underload and Overload.

Direct and Alternating Currents.

Specially designed for use in connection with motors, to open a circuit in case of an overload; also, to open the circuit in case of an underload or a break between motor and service supply. This special device positively protects motor and building against overloads and fires resulting therefrom. It also protects the generator and cables against sudden overloads. The underload feature protects motor and building in case the current is momentarily cut off at the generator end, and is again started without notice.

The two forces employed in this device, namely, gravity and magnetism, make it impossible for the conditions to change after the device has once been adjusted, no springs or other disturbing elements being employed.

It is non-arcing, having a long, clean break of five inches, and can be instantly, and without special effort, reset. Another important feature is the fact that this Circuit Breaker cannot be reset if the same excess of current or trouble still exists on the wires that caused it to open.



Cat. No. 10423.

### Size of Base:

5-45 Amperes, Single-Pole, 6 x 7 x  $\frac{7}{8}$  inches.

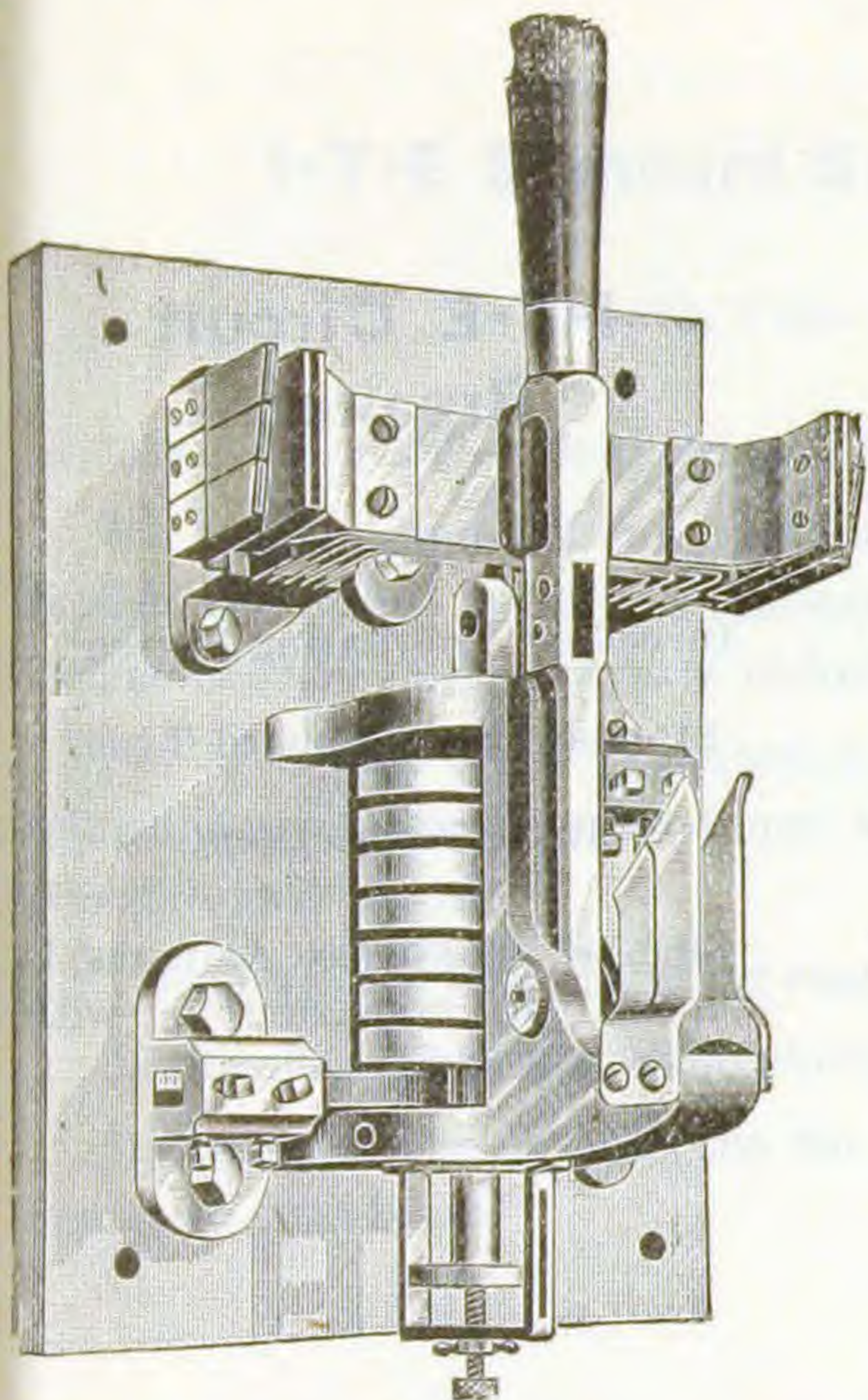
60-200 Amperes, Single-Pole, 6 $\frac{1}{2}$  x 8 x  $\frac{7}{8}$  inches.

5-45 Amperes, Double-Pole, 6 x 7 x  $\frac{7}{8}$  inches.

Cat. No.	Actual Rating Amperes.	Overload Adjustment Steps.	Lowest Amperes.	Highest Amperes.	Underload Adjustment Amperes.	Price, Single Pole.
10423	5	1	5	10	1	\$16.50
10424	7 $\frac{1}{2}$	1 $\frac{1}{2}$	8	16	1 $\frac{1}{2}$	
10425	10	2	10	20	2	
10426	15	3	15	30	3	
10427	20	4	20	40	4	
10428	25	5	25	50	5	
10429	30	6	30	60	6	
10430	45	9	45	90	9	
10431	60	12	60	120	12	22.50
10432	80	16	80	160	16	30.00
10433	100	20	100	200	20	40.00
10434	200	50	150	350	40	50.00

NOTE.—The Single-Pole type of this Circuit Breaker is especially designed for use on 500-volt circuits. Double-Pole Circuit Breakers should not be used on currents of over 250 volts.





CLOSED.

Cat. No. 10440.

## I-T-E Circuit Breaker.

Single-Pole.

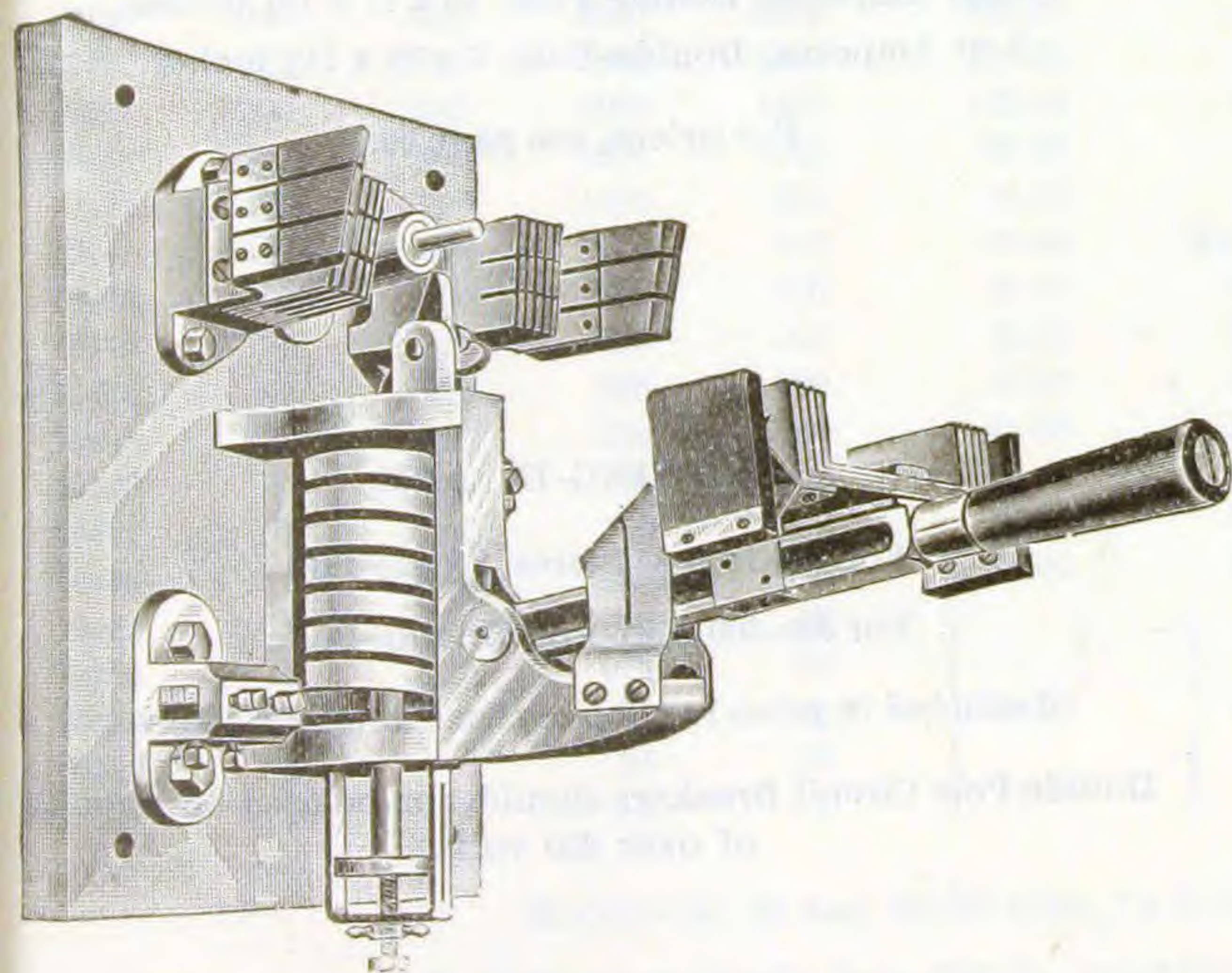
Direct or Alternating Current.

Standard Switchboard Type. Back Connections.

Size of Base :

80-600 Amperes, Single-Pole, 10 x 14 x 1½ inches.

5-60 Amperes, Single-Pole, 7 x 11 x 1¼ inches.

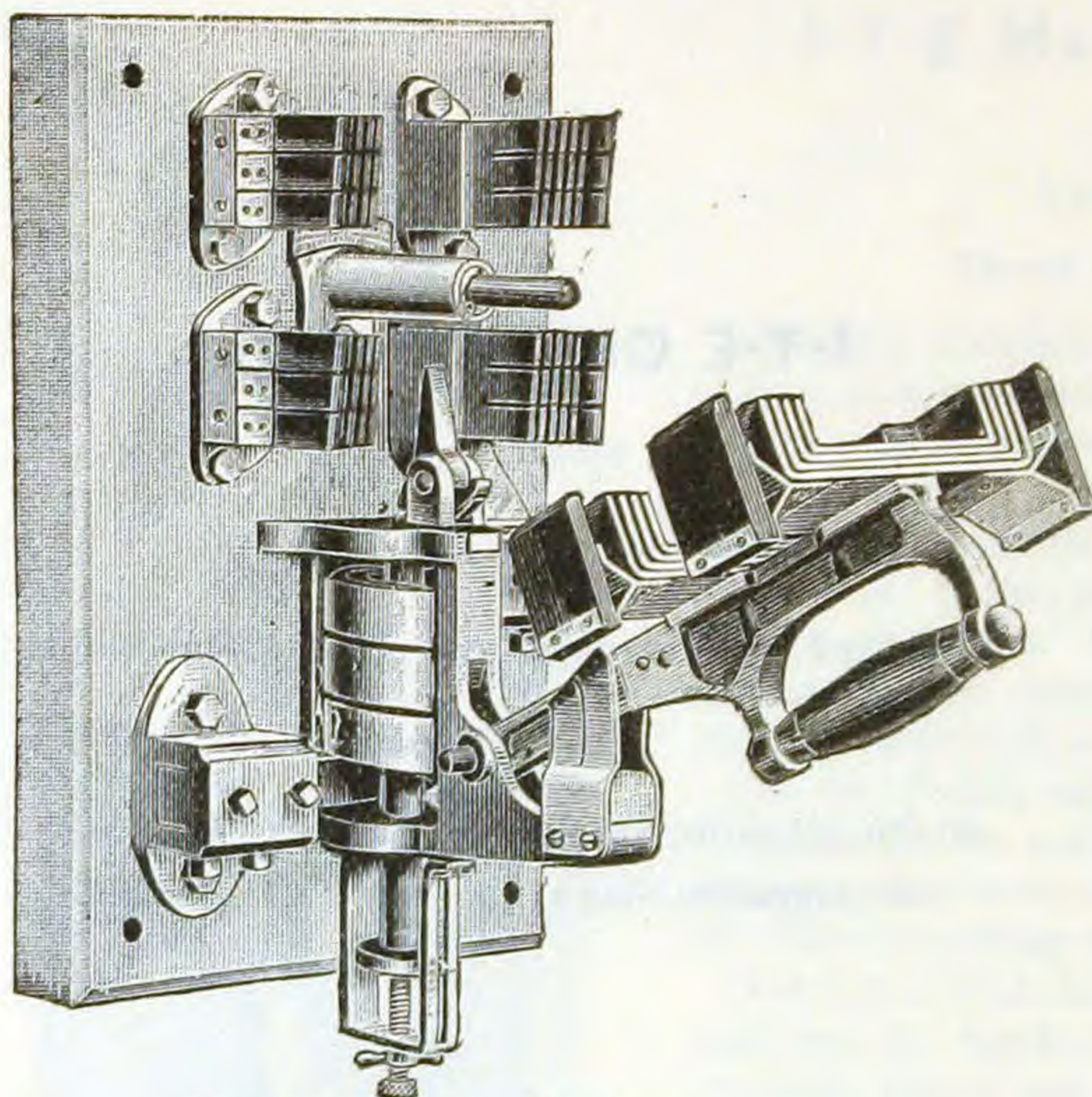


OPEN.

Cat. No. 10440.

For prices, see  
page 69.





DOUBLE POLE. OPEN.  
Cat. No. 10441

## I-T-E Circuit Breaker.

Double-Pole.

Direct or Alternating Current.

Standard Switchboard Type.

Back Connections.

Single-Pole 800-1200 Amperes, is identical in construction with double-pole as here shown.

Size of Base:

- 800-1200, Single-Pole, 11 x 17 x 1 $\frac{3}{4}$  inches.
- 80-600 Amperes, Double-Pole, 10 x 17 x 1 $\frac{3}{4}$  inches.
- 5-60 Amperes, Double-Pole, 7 x 13 x 1 $\frac{1}{4}$  inches.

For prices, see page 69.



THROWING-IN ARM.

### THROWING-IN ARM.

For 800-1200 Amperes, Single-Pole.

For 300-600 Amperes, Double-Pole.

Included in price for above size Circuit Breakers.

Double-Pole Circuit Breakers should not be used on circuits of over 250 volts.



## I-T-E Standard Switchboard Circuit Breaker.

Finish, Price List, Rating and Adjustment,

The I-T-E Standard Switchboard Circuit Breakers are furnished in the following finishes :

**No. 1.** Standard. Mounted on black enameled slate or marble base, as desired. Jacket finished in polished nickel; current-carrying parts natural copper finish, highly polished and lacquered; non-electrical parts nickel-plated.

**No. 3.** Rough Type. Mounted on plain slate base. Jacket copper-plated; current carrying and non-electrical parts dipped finish; all movable iron parts copper-plated; all bearing pins phosphor-bronze.

Price for No. 3 Finish is 10 per cent. less than list of No. 1 Finish.

Double-Pole Circuit Breakers should not be used on circuits of over 250 volts.

Unless otherwise ordered, the No. 1 Finish Circuit Breakers will be mounted on black enameled slate bases.

Cat. No.	Adjustment Amperes. Steps.    Lowest.    Highest.			Actual Rating Amperes.	DIRECT CURRENT.		ALTERNATING CURRENT.	
					No. 1 Finish.		No. 1 Finish.	
					Single Pole.	Double Pole.	Single Pole.	Double Pole.
10435	500	2500	5000	3000	\$400.00	....	\$500.00	....
10436	300	1500	3000	2000	300.00	....	375.00	....
10437	250	1250	2500	1500	150.00	....	187.50	....
10438	200	1000	2000	1200	112.50	....	140.50	....
10439	150	800	1600	1000	98.00	....	122.50	....
10440	100	700	1400	800	98.00	....	122.50	....
10441	100	500	1000	600	69.00	\$103.00	86.25	\$128.75
10442	80	400	800	500	66.00	98.00	82.50	122.50
10443	70	350	700	400	63.00	94.00	78.75	117.50
10444	60	225	525	300	57.00	85.00	71.25	106.25
10445	50	150	350	200	45.00	67.00	56.25	83.75
10446	25	75	175	100	42.00	58.00	48.75	72.50
10447	20	60	150	80	39.00	58.00	48.75	72.50
10448	20	45	125	60	33.00	49.00	41.25	61.25
10449	15	35	95	45	} 30.00	} 45.00	37.50	56.25
10450	15	25	75	30			37.50	56.25
10451	5	15	40	20			37.50	....
10452	4	8	24	10			37.50	....
10453	2	4	12	5			...	....

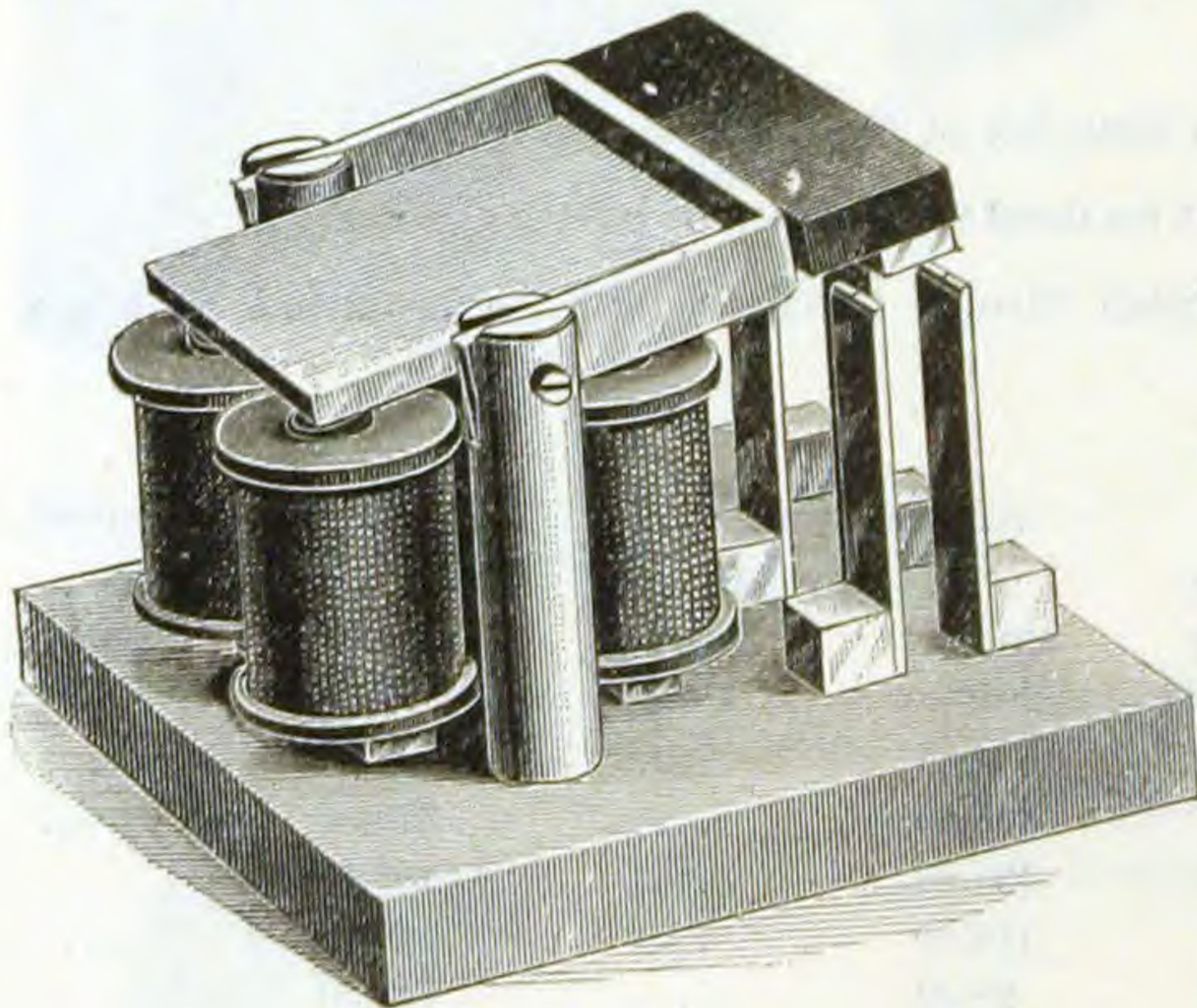
Exception : 80 and 100 HI type, 7 x 11 base.

Direct Current, Single-Pole, \$36.00; Double-Pole, \$54.00.

Alternating Current, Single-Pole, \$45.00; Double-Pole, \$67.50.



## Automatic Switches for Two or Three-Wire Systems.



AUTOMATIC SWITCH.

Cat. No. 10454.

A switch, by means of which an electric light or motor current of any quantity or electro-motive force may be controlled from any number of points, without the necessity of carrying the main current wires to such several points, has been so long recognized as a valuable but *missing* appliance, that the mere announcement of its existence and availability will be welcomed as a relief by all electric light and motor contractors, to whom the problem of multiplying the points of control has so often proven a vexation.

The new Automatic Switch, which we illustrate here and now bring to the attention of our customers and the public, is as effective and absolute in its action as the best hand switch, and is operated by means of ordinary single push buttons, located wherever it is desired to have control of a given circuit, and connected with the Automatic Switch by means of the smallest size wires. As these wires carry but a fraction of an ampere, they may run any distance and ramify throughout the largest building without regard to their carrying capacity.

To give some idea of the value of this new appliance we enumerate some of the advantages accruing from its use.

### ADVANTAGES OF USING OUR AUTOMATIC SWITCHES.

FIRST.—Great economy of copper and labor in wiring by the substitution of small wires of uniform size for the heavy main current wires, which otherwise would have to be brought within reach, very often greatly out of reach of their natural channel.

SECOND.—Great added convenience by being enabled to switch on the lamp or motor from *one* point turning them off from *another*.

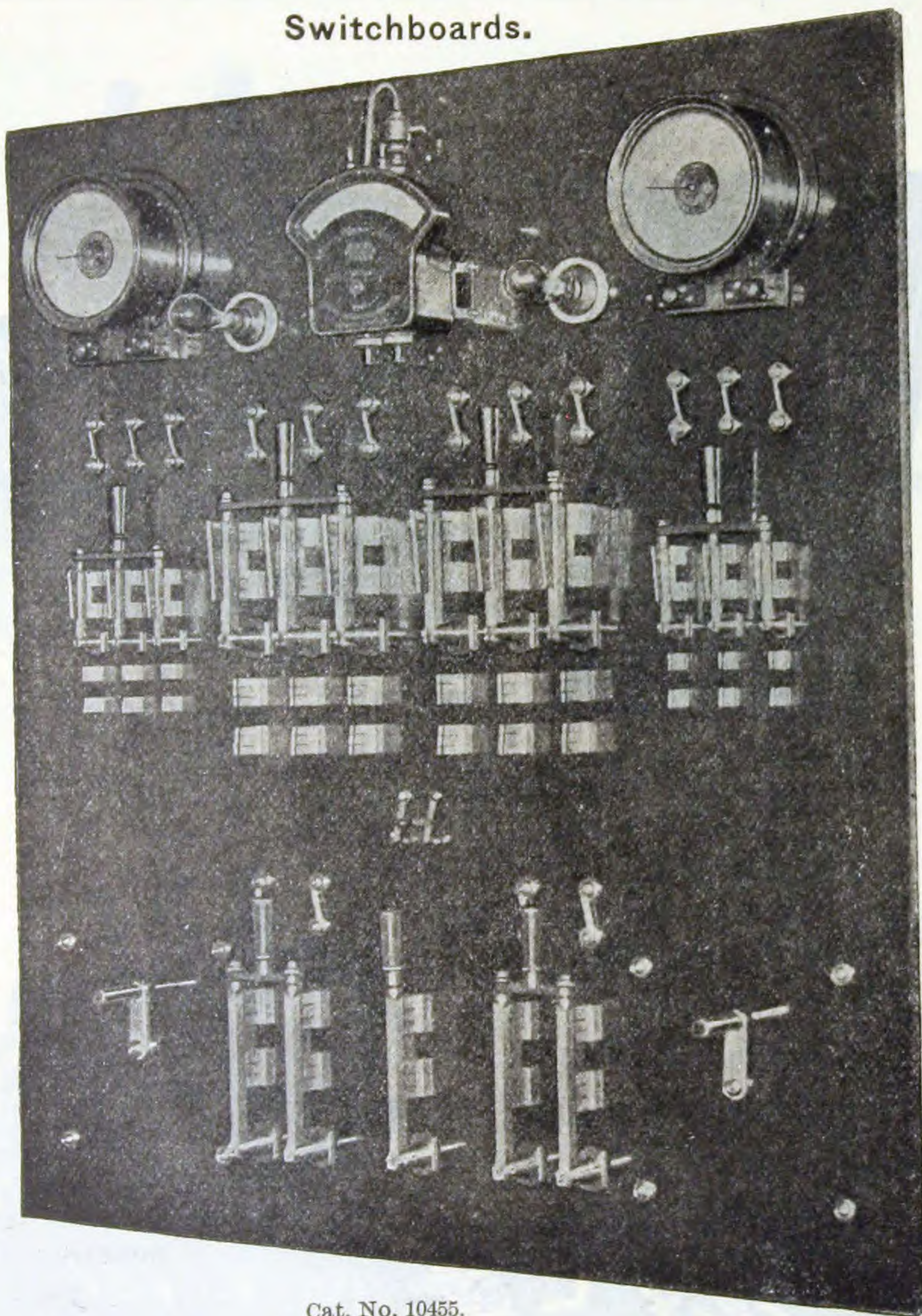
THIRD.—Complete command of the entire current supply of a house, store, factory, etc., by placing our Automatic Switch between the meter and the street service, thereby rendering the premises absolutely free from the suspicion of fire, as well as preventing any waste of current during the hours when none is required.

Cat. No.

Price.

10454 Automatic Switch, each..\$30.00



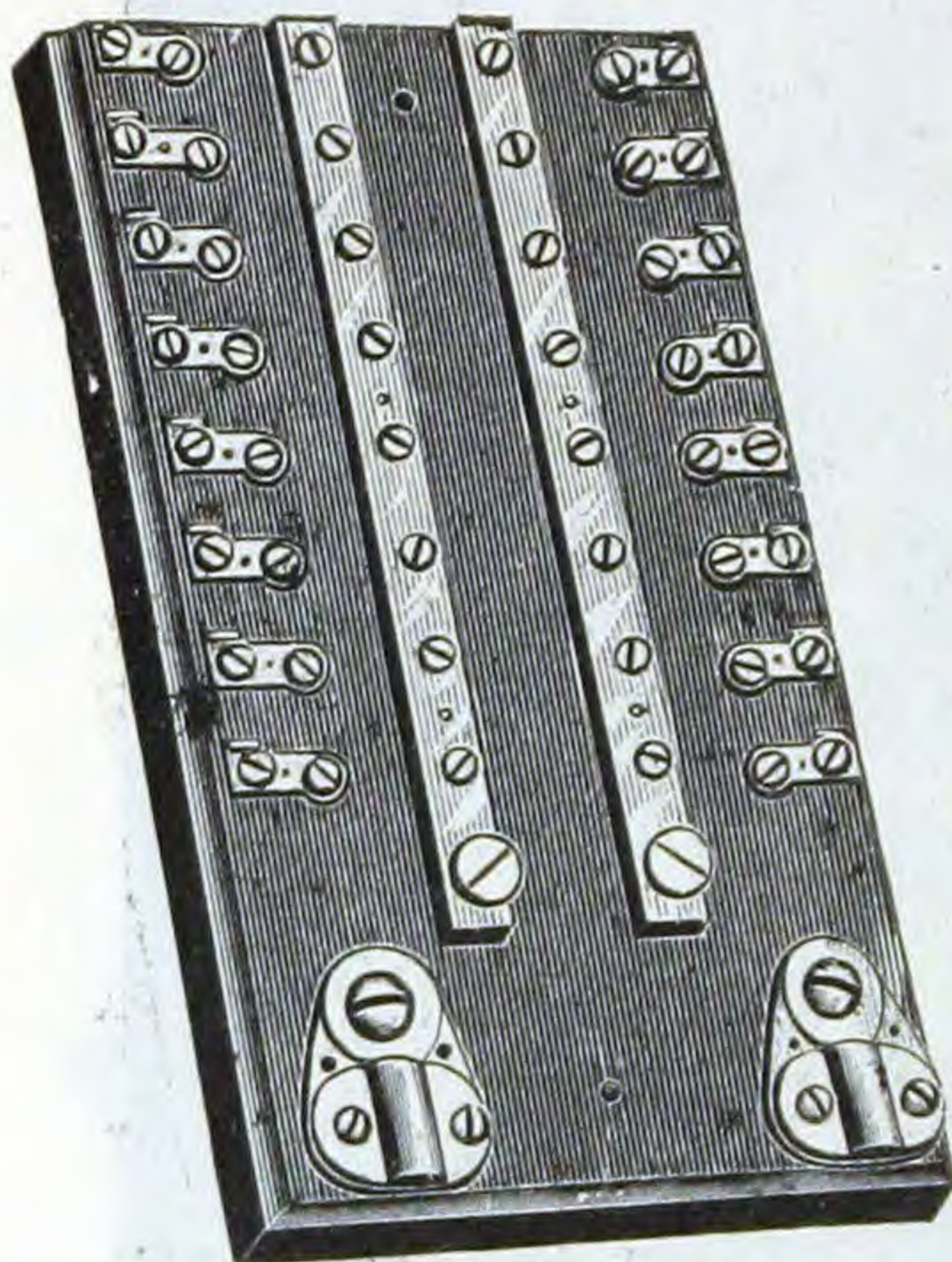
**Switchboards.**

Cat. No. 10455.

We would ask special attention to our excellent facilities for making complete Switchboards, the result of large and varied experience, and believe our equipment to be unsurpassed for producing superior work at moderate cost.

We solicit correspondence relative to work of this character, and will gladly furnish estimates on receipt of designs or specifications. Or if given a general idea of the requirements, we have a large number of designs of boards for lighting plants from 150 to 3000 lights, from which we can readily select and submit a design covering what is wanted.





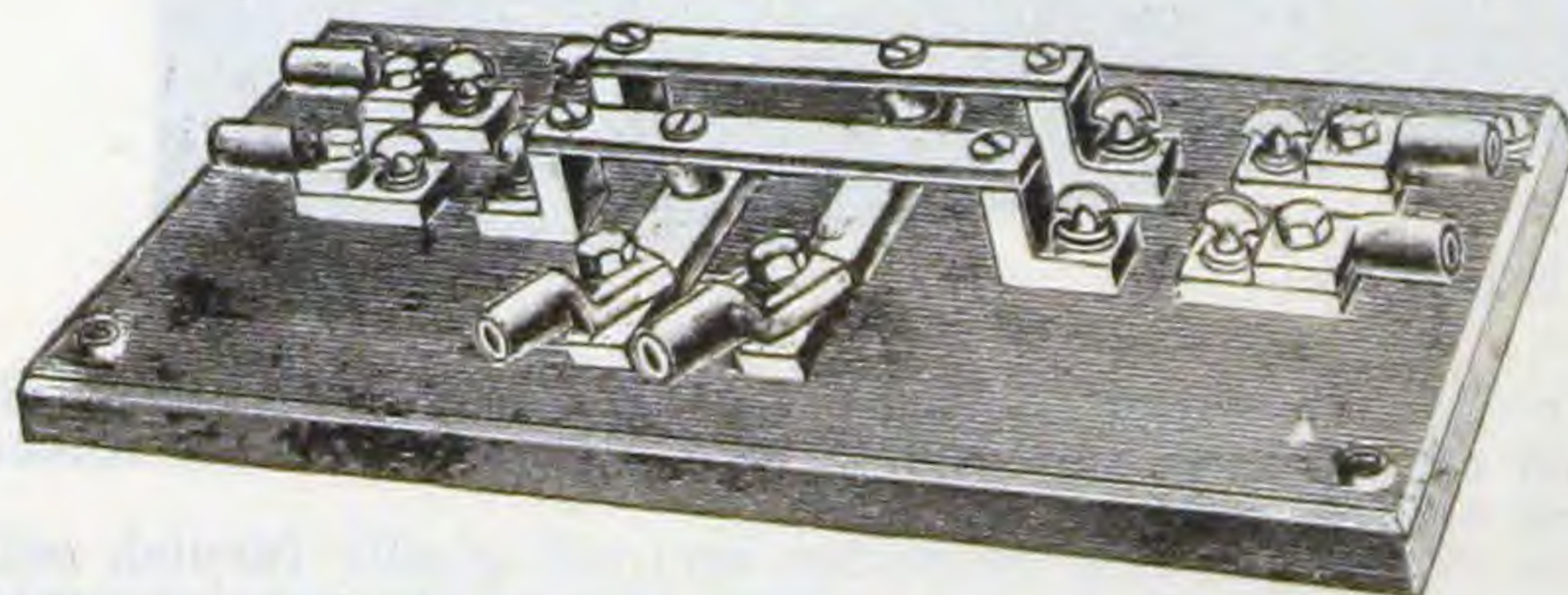
TWO-WIRE PANEL BOARD.

Cat. No. 10458.

## Panel and Distributing Boards.

## SLATE PANEL BOARDS.—TWO-WIRE.

Cat. No.		Price.
10456	6 Circuits.....	\$6.00
10457	7     ".....	7.00
10458	8     ".....	8.00
10459	9     ".....	9.00
10460	10    ".....	9.75
10461	11    ".....	10.25
10462	12    ".....	11.50
10463	13    ".....	12.75
10464	14    ".....	14.00
10465	15    ".....	15.00



DISTRIBUTING BOARD.

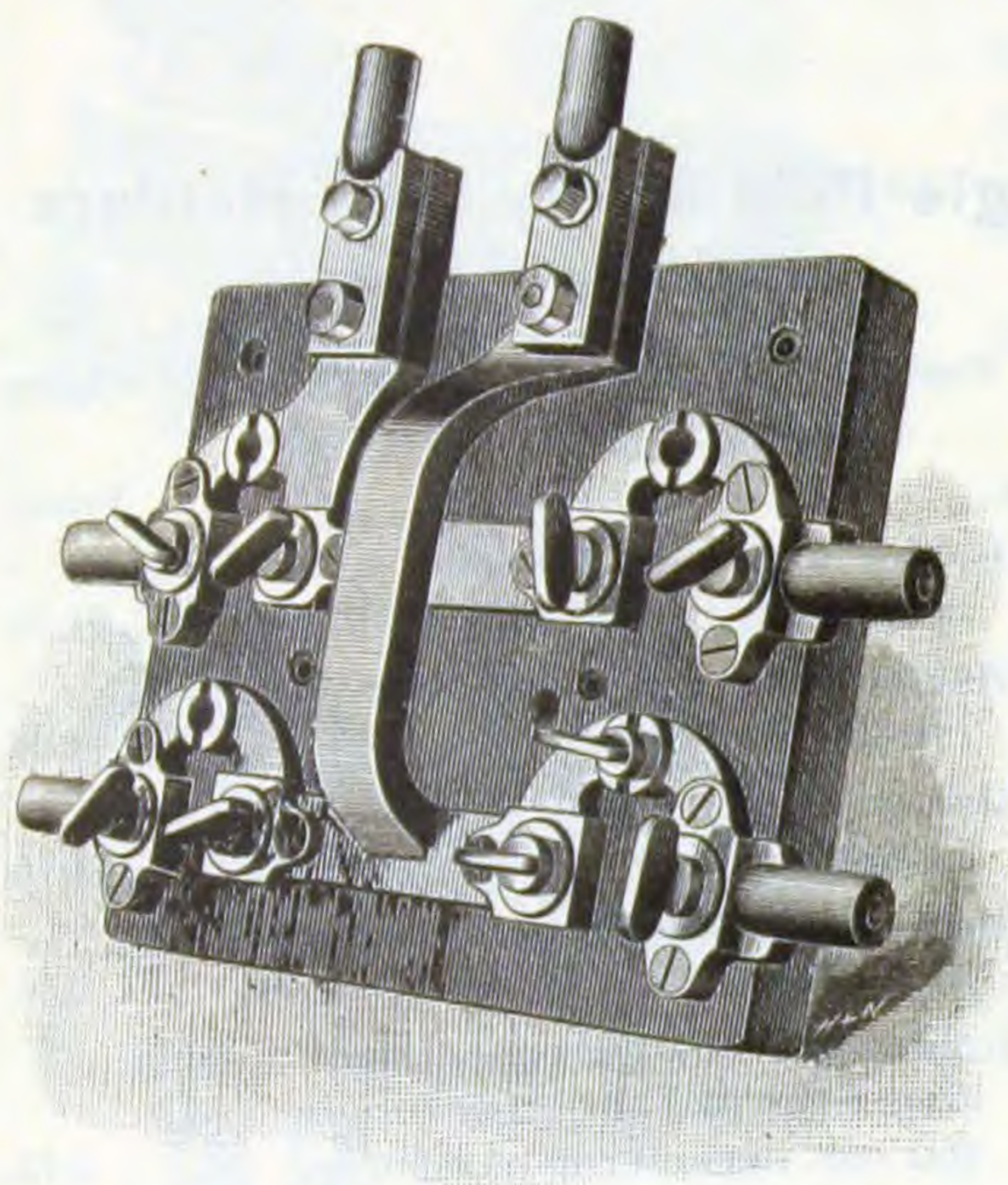
Cat. No. 10466.

SLATE DISTRIBUTING  
BOARDS.

Cat. No.	Amp.	Two Wire. Price.	Three Wire. Price.
10466	200	\$17.50	\$26 25
10467	300	21.00	32.50
10468	500	30.00	50.00
10469	750	50.00	75.00

Mounted on marble if desired.



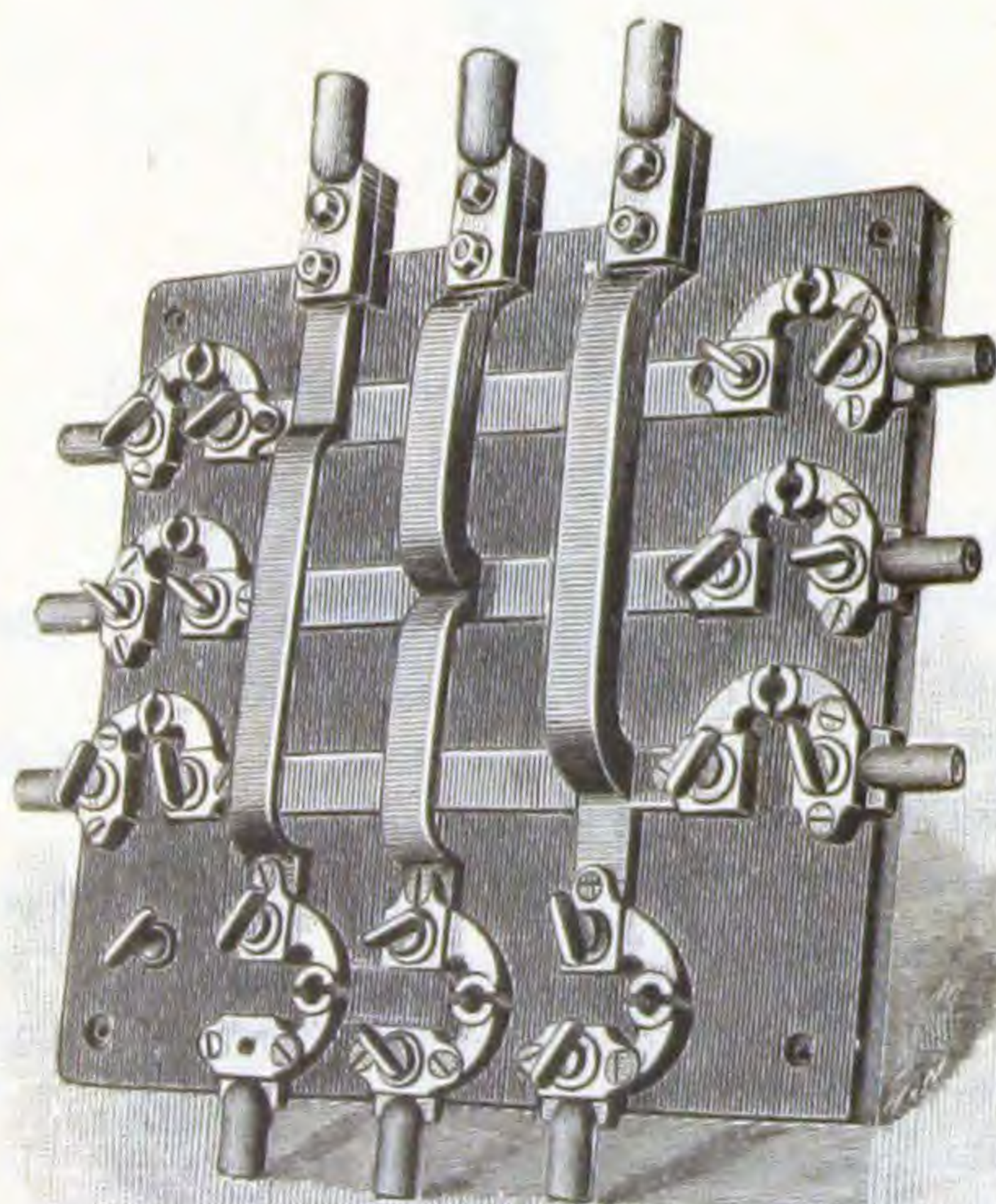


Cat. No. 60616.

### Center of Distribution Fuse-Holders.

The maximum capacity of these Fuse-Holders is 250 amperes per branch. They are all mounted on slate bases.

Cat. No.	Price.
60616 Two-Wire, Two-Branch.	
Plain finish.....	\$16.00
60617 Two-Wire, Three-Branch.	
Plain finish.....	22.50



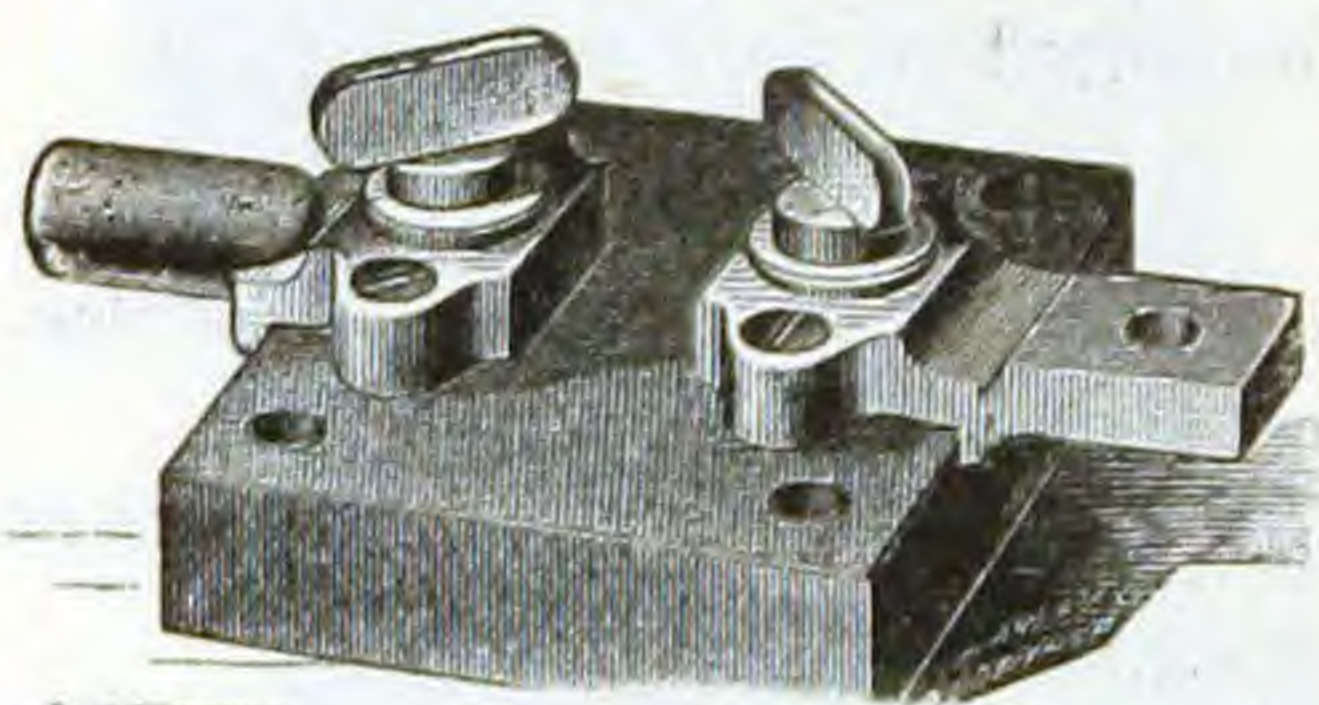
Cat. No. 60619.

60618 Three-Wire, Two-Branch.	
Plain finish.....	27.50
60619 Three-Wire, Three-Branch.	
Plain finish....	37.50



### Single-Pole Safety Fuse-Holders on Slate Bases.

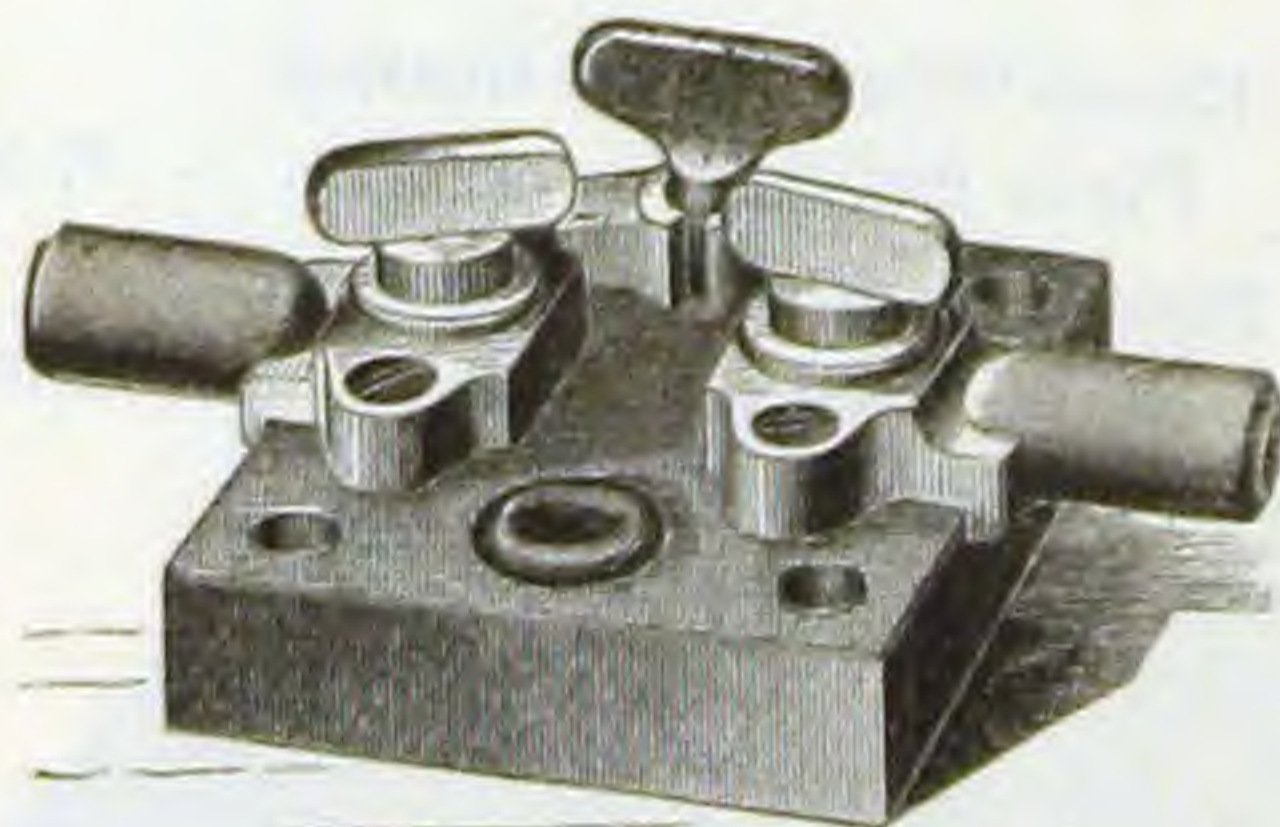
These Fuse-Holders are for use on circuits whose potential is not over 250 volts.



Cat. Nos. 65107 to 65112.

Cat. No.		Price.
65107	Holder with end connection for $\frac{1}{2}$ in. round rod, capacity 250 Amperes.....	\$1.75
65108	Holder with end connection for $\frac{3}{4}$ in. round rod, capacity 600 Amperes.....	4.00
65109	Holder with end connections for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 250 Amperes.....	1.75
65110	Holder with end connections for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 600 Amperes. . . .	4.75
65111	Holder with one end connection for $\frac{1}{2}$ in. round rod and the other for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 250 Amperes. . . . .	1.75
65112	Holder with one end connection for $\frac{3}{4}$ in. round rod and the other for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 600 Amperes.....	4.75

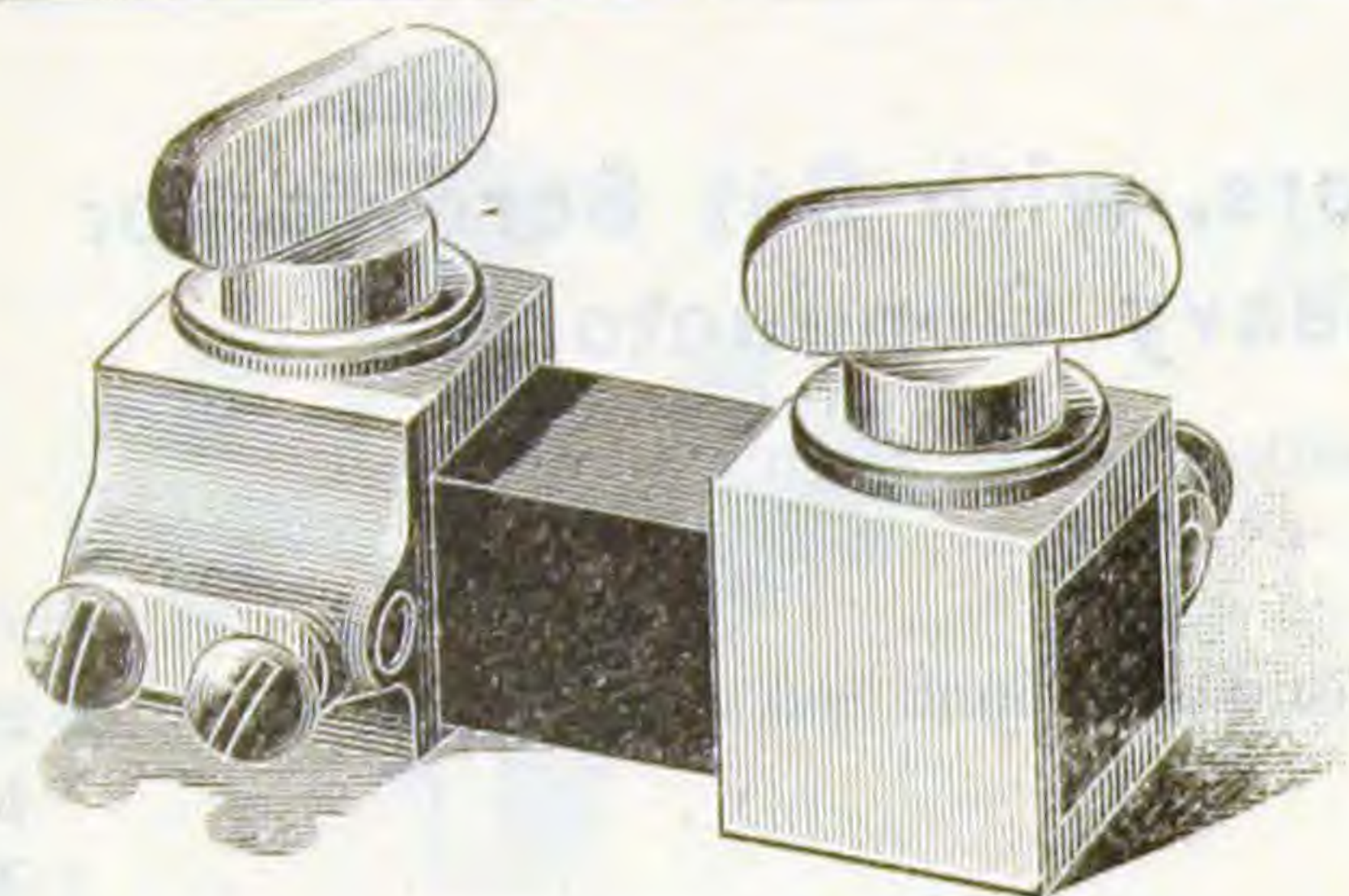
### HOLDERS WITH PLUG FOR BRIDGING AROUND FUSE.



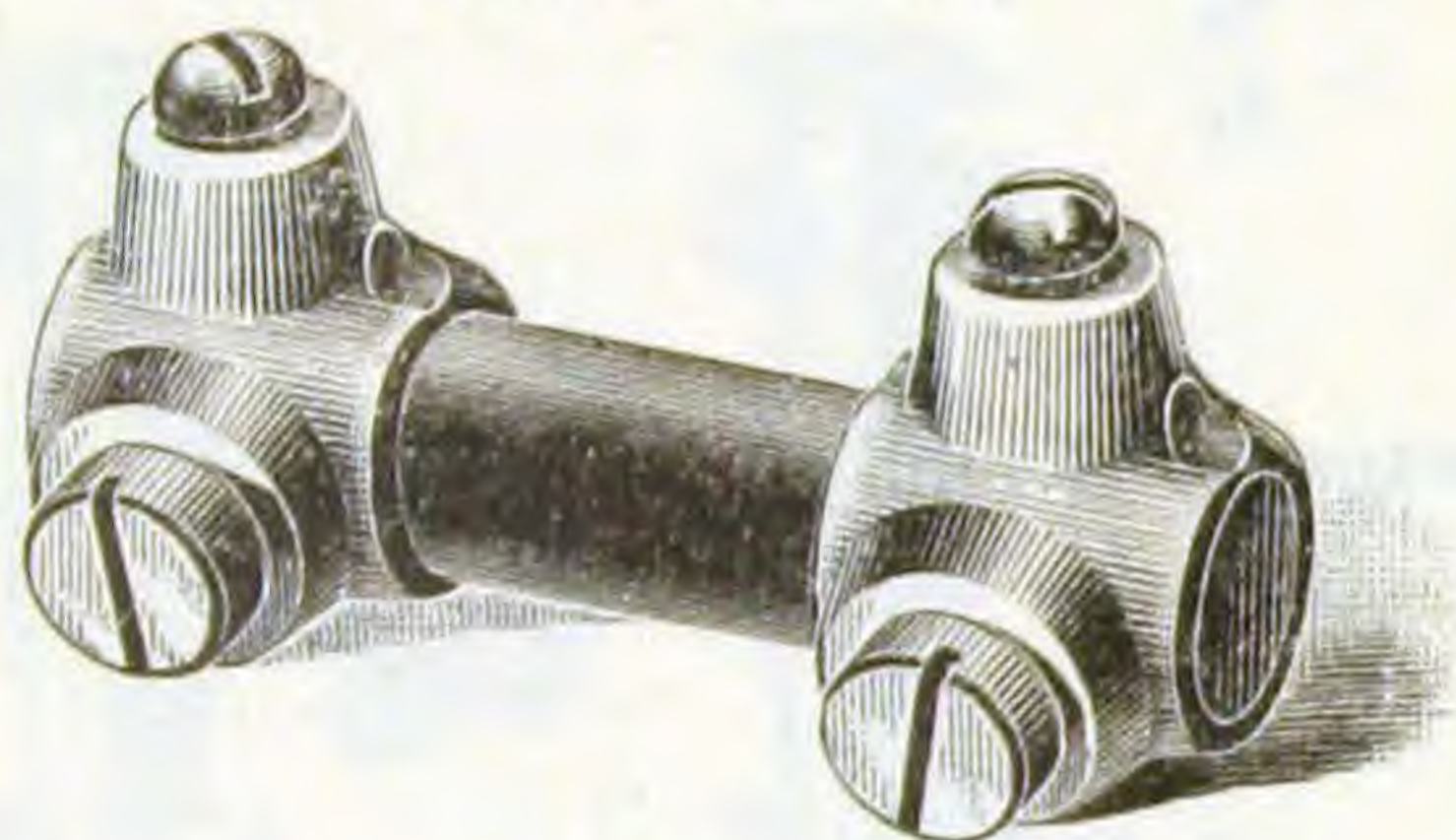
Cat. Nos. 65113 to 65118.

65113	Holder with end connections for $\frac{1}{2}$ in. round rod, capacity 250 Amperes.....	3.00
65114	Holder with end connections for $\frac{3}{4}$ in. round rod, capacity 600 Amperes.....	6.50
65115	Holder with end connections for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 250 Amperes.....	3.00
65116	Holder with end connections for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 600 Amperes.....	7.00
65117	Holder with one end connection for $\frac{1}{2}$ in. round rod and the other end for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 250 Amperes....	3.00
65118	Holder with one end connection for $\frac{3}{4}$ in. round rod and the other end for 1 in. x $\frac{1}{4}$ in. flat bar, capacity 600 Amperes....	7.00

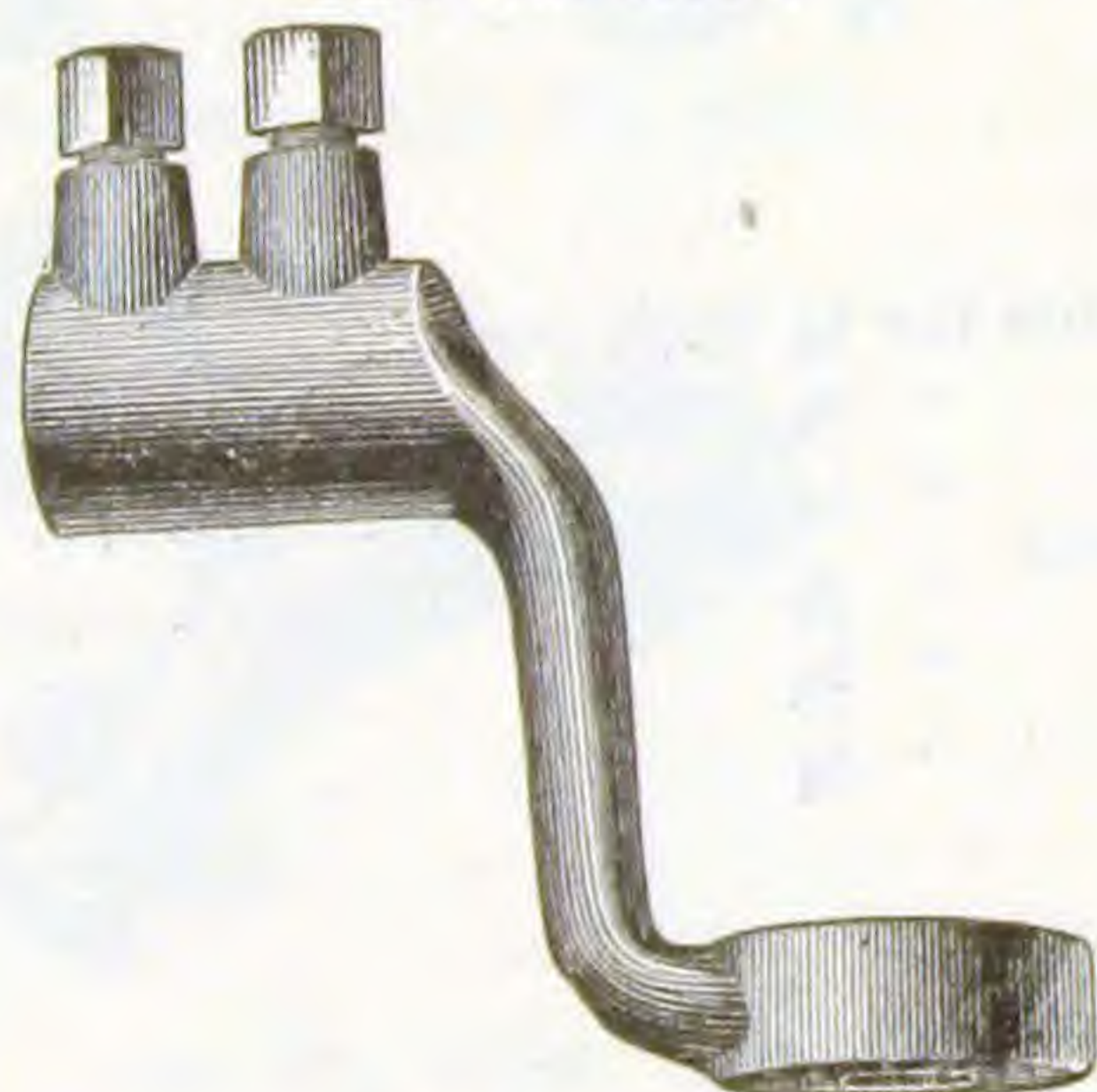




Cat. No. 67273.



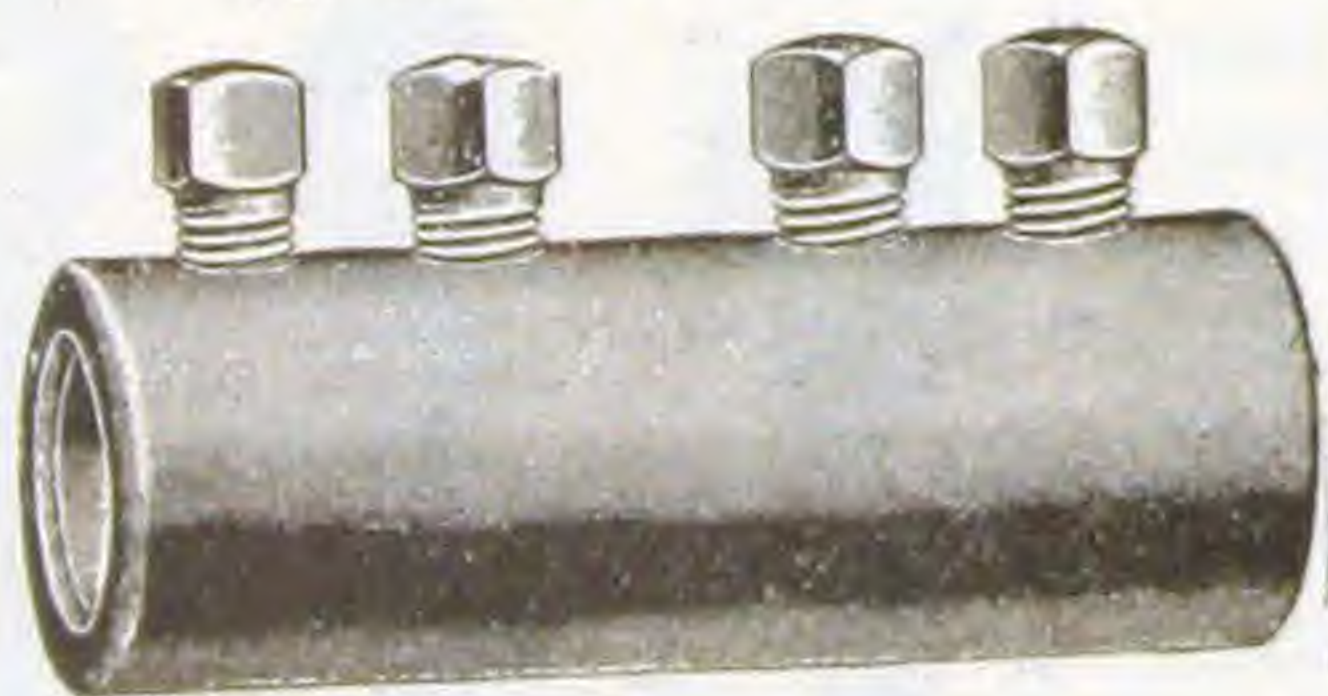
Cat. No. 61701.



Cat. No. 61711.



Cat. No. 10470.



Cat. No. 10475.

## Pole Line Safety Fuse-Holders.

Cat. No.	Price.
67273 Fuse-Holder with two end connections for $\frac{1}{4}$ in. wire .....	\$1.25
67275 Fuse-Holder with two end connections for $\frac{1}{2}$ in. wire.....	1.50
67277 Fuse-Holder with one end connection for $\frac{1}{4}$ in. wire, and one for Lug or Arm.....	1.25
67279 Fuse-Holder with one end connection for $\frac{1}{2}$ in. wire, and one for Lug or Arm.....	1.35
13805 Brass Bolt with nut for coupling two or three of the above together.....	.18
13806 Brass Bolt with nut for coupling four of the above together.....	.20
61701 Fuse-Holder for Pressure Wires.....	.40
61707 Lug for Fuse-Holder for $\frac{1}{4}$ in. wire...	.65
61708 Lug for Fuse-Holder for $\frac{1}{2}$ in. wire...	.65

61711 Arm for Fuse-Holder for $\frac{1}{4}$ in. wire...	.75
61712 Arm for Fuse-Holder for $\frac{1}{2}$ in. wire...	.80

## Wire Connections.

### SINGLE SCREW.

Cat. No.	Outside Size.	Size of Wire.	Price.
10470	$\frac{3}{8}$	6	per 100..... \$8.60
10471	$\frac{7}{16}$	4	" ..... 9.50
10472	$\frac{1}{2}$	2	" ..... 11.50
10473	$\frac{9}{16}$	0	" ..... 14.50
10474	$\frac{5}{8}$	00	" ..... 16.00

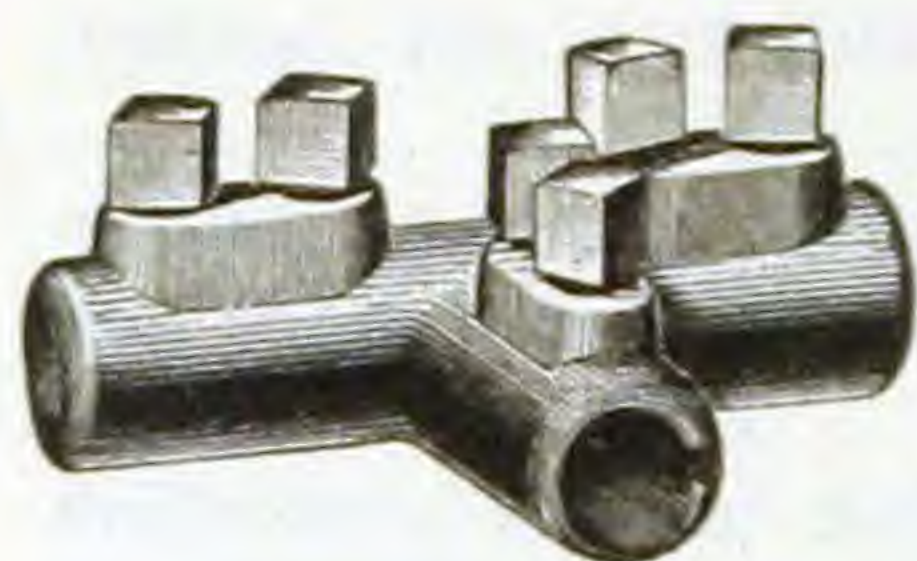
### DOUBLE SCREW.

10475	$\frac{3}{4}$	000	per 100..... 40.00
10476	$\frac{7}{8}$	0000	" ..... 47.00
10477	1	$\frac{5}{8}$	" ..... 55.00
10478	$1\frac{1}{8}$	$\frac{3}{4}$	" ..... 65.00



## Connectors, with Set Screws, for Heavy Conductors.

Composition Metal, High Conductivity.



Cat. Nos. 65161 to 65171.

Cat No.		Price.
65161	T Connector for $\frac{1}{4}$ inch rod.....	\$0.25
65163	" " $\frac{3}{8}$ " .....	.40
65165	" " $\frac{1}{2}$ " .....	1.00
65167	" " $\frac{3}{4}$ " .....	1.40
65169	" " $\frac{5}{8}$ " .....	1.50
65171	" " $\frac{3}{4}$ " .....	1.75



Cat. Nos. 65173 to 65183.

65173	Elbow Connector for $\frac{1}{4}$ inch rod.....	.20
65175	" " $\frac{3}{8}$ " .....	.40
65177	" " $\frac{1}{2}$ " .....	.70
65179	" " $\frac{3}{4}$ " .....	.80
65181	" " $\frac{5}{8}$ " .....	.90
65183	" " $\frac{3}{4}$ " .....	1.40



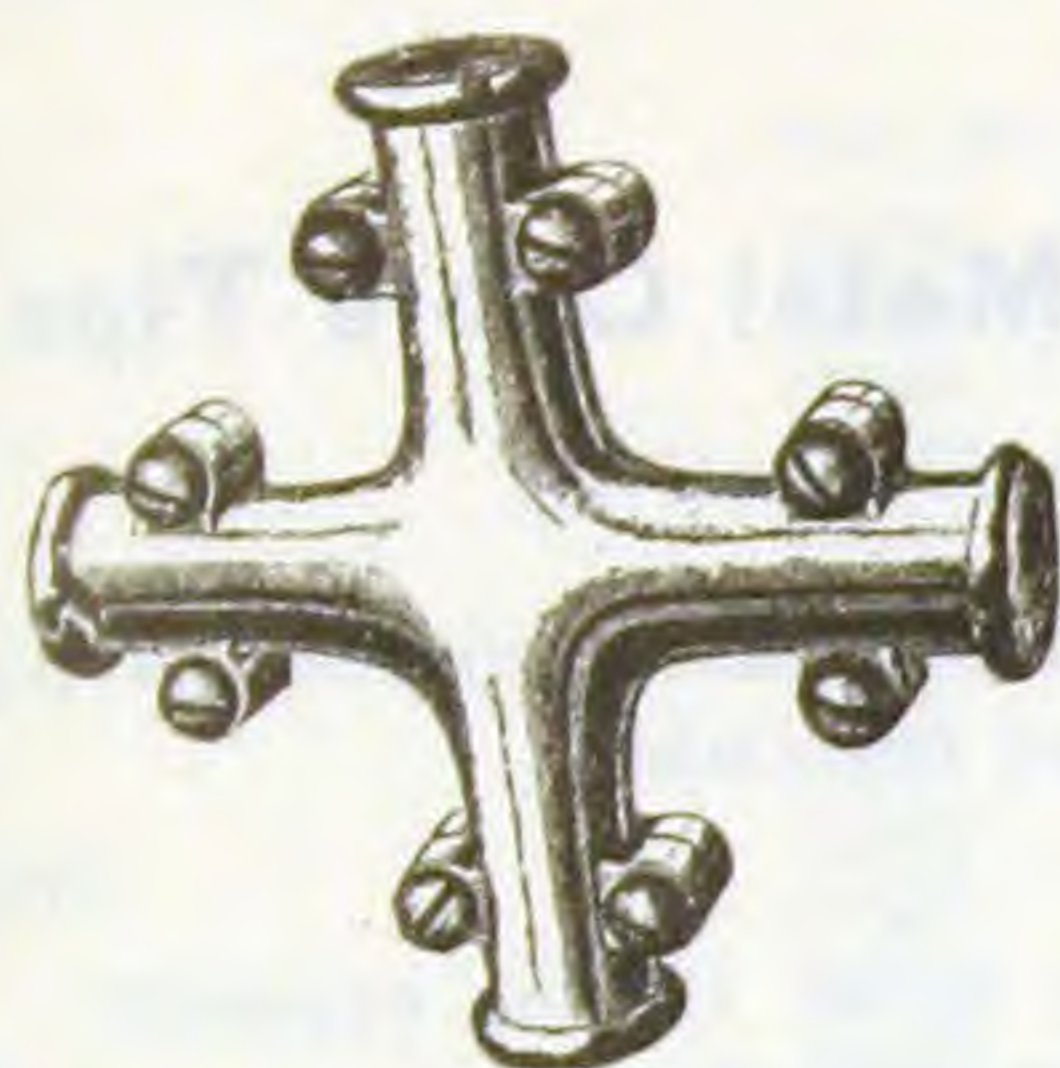
Cat. Nos. 67361 to 67371.

67361	Straight Connector for $\frac{1}{4}$ inch rod.....	.20
67363	" " $\frac{3}{8}$ " .....	.30
67365	" " $\frac{1}{2}$ " .....	.65
67367	" " $\frac{3}{4}$ " .....	.75
67369	" " $\frac{5}{8}$ " .....	.85
67371	" " $\frac{3}{4}$ " .....	1.30

## Connectors for Heavy Conductor.

65189	Cross Connection for $\frac{1}{4}$ inch rod.....	\$1.00
65193	" " $\frac{3}{8}$ " .....	1.75
65197	" " $\frac{1}{2}$ " .....	2.00
65201	" " $\frac{5}{8}$ " .....	3.00
65205	" " $\frac{3}{4}$ " .....	4.00
65209	T or Y Connection for $\frac{1}{4}$ inch rod.....	.90
65213	" " $\frac{3}{8}$ " .....	1.40
65217	" " $\frac{1}{2}$ " .....	1.60
65221	" " $\frac{5}{8}$ " .....	2.00
65225	" " $\frac{3}{4}$ " .....	3.00
65229	Straight Connection for $\frac{1}{4}$ inch rod.....	.65
65233	" " $\frac{3}{8}$ " .....	.90
65237	" " $\frac{1}{2}$ " .....	1.10
65241	" " $\frac{5}{8}$ " .....	1.50
65245	" " $\frac{3}{4}$ " .....	2.00

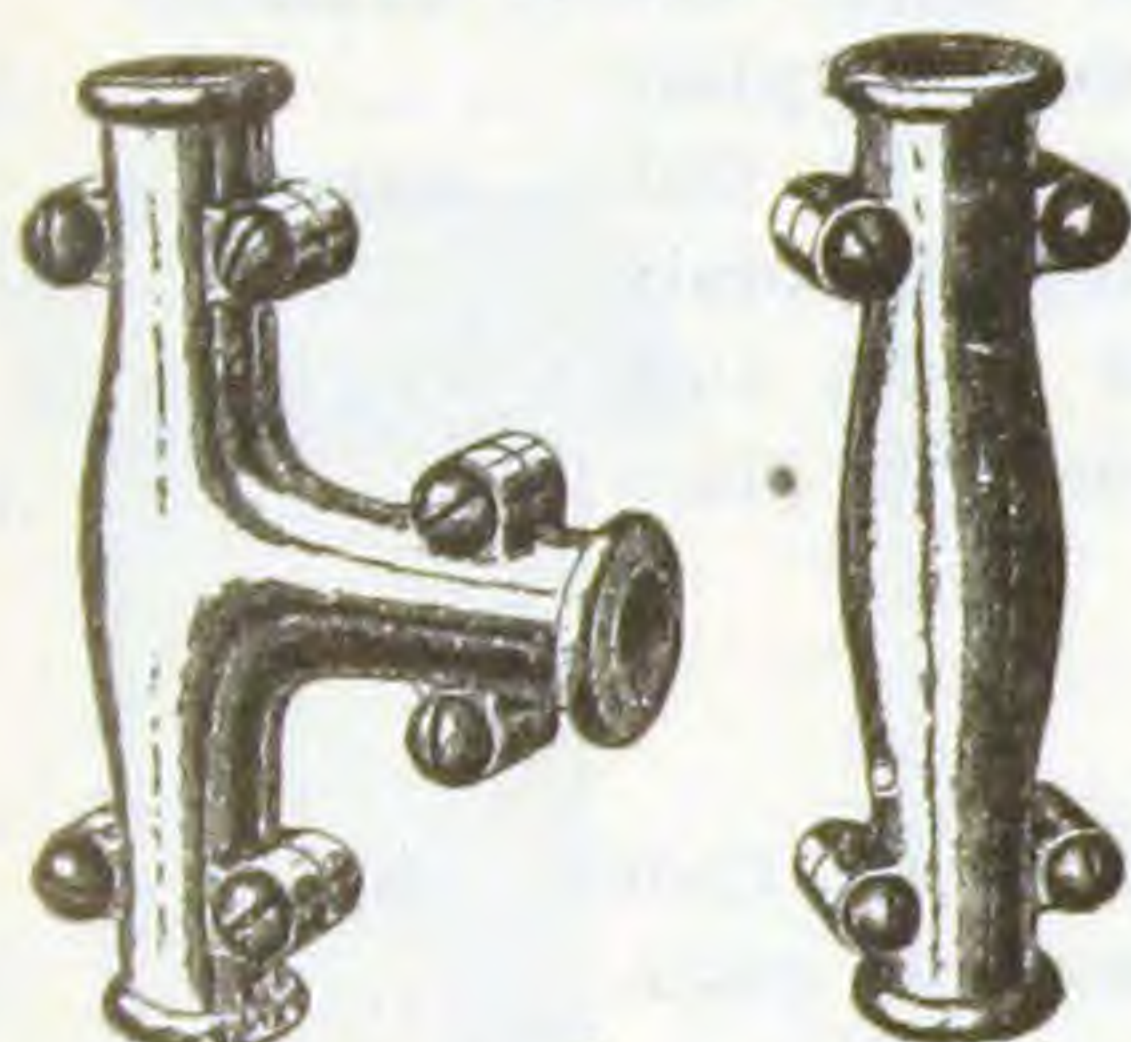




Cat. No. 10479.

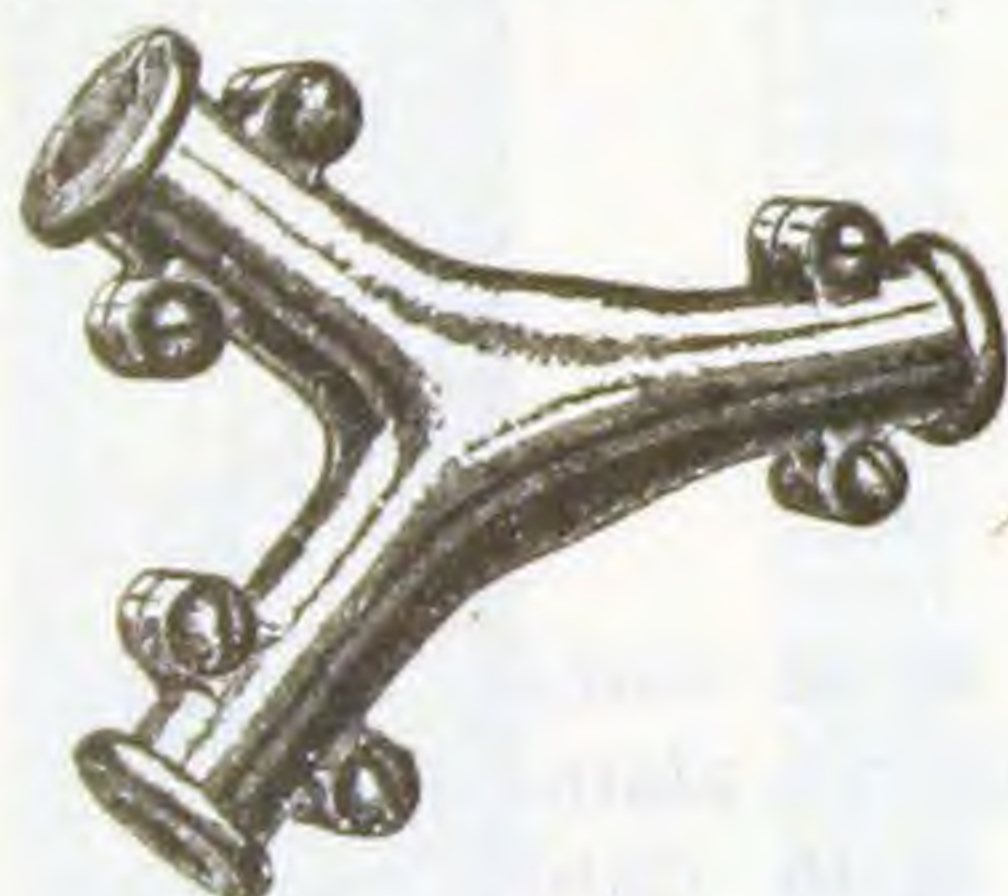
## Clamp Connections for Heavy Conductors.

Cat. No.	Price.
10479 Cross Connection for $\frac{3}{16}$ inch rod, each.....	\$2.20



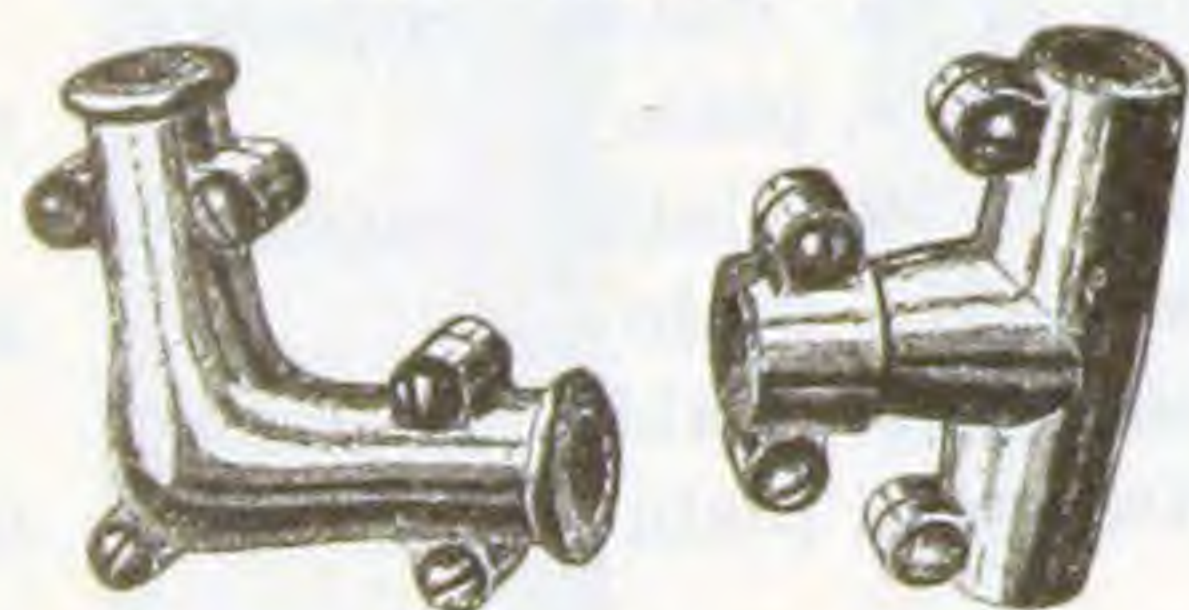
Cat. No. 10480. Cat. No. 10481.

10480	T Connection for $\frac{9}{16}$ inch rod, each.....	1.45
10481	Straight Connection for $\frac{9}{16}$ inch rod, each.....	1.10



Cat. No. 10482.

10482	Y Connection for $\frac{9}{16}$ inch rod, each...	1.15
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Cat. No. 10483. Cat. No. 10484.

10483	L Connection for $\frac{9}{16}$ inch rod, each.....	1.25
10484	T Connection for $\frac{9}{16}$ inch rod, each.....	1.20

### Wire Terminals.



Cat. Nos. 10485 to 10493.

10485	For No. 12 Wire, B. & S. G., per 100.....	\$8.50
10486	"     10     "                 "                 " .....	9.50
10487	"     8     "                 "                 " .....	10.50
10488	"     6     "                 "                 " .....	12.50
10489	"     4     "                 "                 " .....	14.50
10490	"     3     "                 "                 " .....	15.50
10491	"     2     "                 "                 " .....	16.75
10492	"     1     "                 "                 " .....	19.00
10493	"     0     "                 "                 " .....	23.00



## Composition Metal Cable Tips.

For High Conductivity.

When ordering Cable Tips, state diameter of bore required for Cable.



STYLE A.

Cat. No.	Style.		Price.
52405	A	Tip for $\frac{1}{2}$ in. Cable, capacity 100 Amperes, plain.....	\$0.20
52406	A	Tip for $\frac{3}{8}$ in. Cable, capacity 100 Amperes, plain.....	.20
52407	A	Tip for $\frac{5}{16}$ in. Cable, capacity 200 Amperes, plain.....	.30
52408	A	Tip for $\frac{3}{4}$ in. Cable, capacity 200 Amperes, plain.....	.75



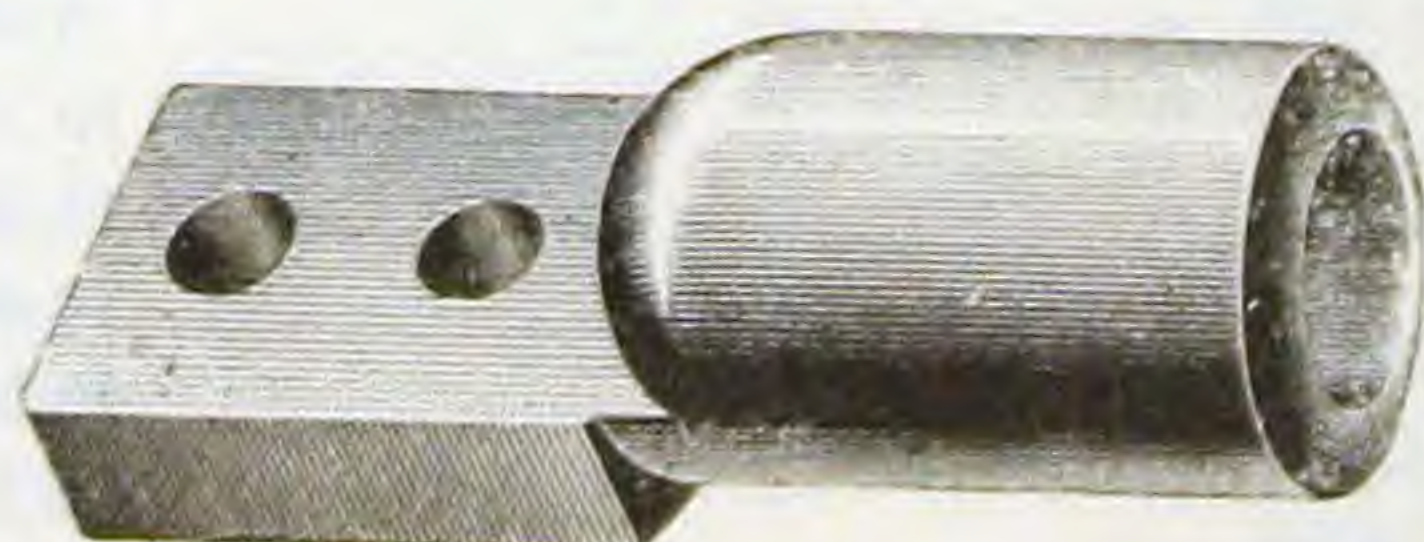
STYLE B.

52413	B	Tip for $\frac{3}{4}$ in. Cable, capacity 400 Amperes, plain.....	.75
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STYLE C.

52446	C	Tip for $\frac{1}{2}$ in. Cable, capacity 100 Amperes, plain.....	.20
52447	C	Tip for $\frac{3}{4}$ in. Cable, capacity 200 Amperes, plain.....	.35
52448	C	Tip for $\frac{5}{16}$ in. Cable, capacity 200 Amperes, plain.....	.35
52449	C	Tip for $\frac{1}{2}$ in. Cable, capacity 300 Amperes, plain.....	.35
52450	C	Tip for $\frac{3}{8}$ in. Cable, capacity 400 Amperes, plain.....	.80



STYLE D.

52451	D	Tip for $1\frac{1}{8}$ in. Cable, capacity 600 Amperes, plain.....	1.20
52452	D	Tip for $1\frac{1}{4}$ in. Cable, capacity 800 Amperes, plain.....	1.20
52453	D	Tip for $1\frac{3}{8}$ in. Cable, capacity 1000 Amperes, plain.....	2.50
52454	D	Tip for $1\frac{7}{8}$ in. Cable, capacity 1500 Amperes, plain.....	4.00



## PORCELAIN TUBES.

Cat. No.	PORCELAIN TUBES.		Price.
10494	$\frac{5}{16}$ in. Hole, $\frac{5}{8}$ in. Outside,	$2\frac{1}{2}$ in. Long.	\$8.00 per M.
10495	"	3 "	10.00 "
10496	"	4 "	13.00 "
10497	"	5 "	18.00 "
10498	"	6 "	24.00 "
10499	"	8 "	4 cts. ea.
10500	"	10 "	6 "
10501	"	12 "	10 "
10502	"	14 "	13 "
10503	"	16 "	15 "
10504	"	18 "	18 "
10505	"	20 "	21 "
10506	$\frac{3}{8}$ in. Hole, $\frac{3}{4}$ in. Outside,	3 in. Long.	\$13.00 per M.
10507	"	4 "	15.00 "
10508	"	5 "	24.00 "
10509	"	6 "	32.00 "
10510	"	8 "	5 cts. ea.
10511	"	10 "	7 "
10512	"	12 "	12 "
10513	"	14 "	14 "
10514	"	16 "	16 "
10515	"	18 "	19 "
10516	"	20 "	25 "
10517	"	24 "	36 "
10518	$\frac{1}{2}$ in. Hole, $\frac{7}{8}$ in. Outside,	3 in. Long.	\$22.00 per M.
10519	"	4 "	32.00 "
10520	"	5 "	40.00 "
10521	"	6 "	72.00 "
10522	"	8 "	12 cts. ea.
10523	"	10 "	15 "
10524	"	12 "	24 "
10525	"	14 "	26 "
10526	"	16 "	30 "
10527	"	18 "	35 "
10528	"	20 "	40 "
10529	"	24 "	46 "
10530	$\frac{5}{8}$ in. Hole, 1 in. Outside,	3 in. Long.	\$24.00 per M.
10531	"	4 "	36.00 "
10532	"	5 "	44.00 "
10533	"	6 "	80.00 "
10534	"	8 "	12 cts. ea.
10535	"	10 "	15 "
10536	"	12 "	24 "
10537	"	14 "	26 "
10538	"	16 "	30 "
10539	"	18 "	35 "
10540	"	20 "	40 "
10541	"	24 "	46 "
10542	1 in. Hole, $1\frac{3}{8}$ in. Outside,	3 in. Long.	5 "
10543	"	4 "	7 "
10544	"	5 "	9 "
10545	"	6 "	10 "
10546	"	8 "	15 "
10547	"	10 "	18 "
10548	"	12 "	28 "
10549	"	14 "	33 "
10550	"	16 "	38 "
10551	"	18 "	42 "
10552	"	20 "	47 "
10553	"	24 "	56 "
10554	$1\frac{1}{4}$ in. Hole, $1\frac{5}{8}$ in. Outside,	3 in. Long.	6 "
10555	"	4 "	8 "
10556	"	5 "	10 "
10557	"	6 "	14 "
10558	"	8 "	18 "
10559	"	10 "	23 "
10560	"	12 "	32 "
10561	"	14 "	38 "
10562	"	16 "	44 "
10563	"	18 "	50 "
10564	"	20 "	55 "
10565	"	24 "	68 "





## PORCELAIN TUBES.

### Large China Tubes.

In ordering always give outside and inside diameter.

#### PRICE LIST OF EACH SIZE, IN CENTS.

Length in Inches—				5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$\frac{5}{16}$ in. Hole, $\frac{5}{8}$ in. outside diam.				3	4	5	6	7	8	12 $\frac{1}{2}$	14	15 $\frac{1}{2}$	17	18 $\frac{1}{2}$	20	21 $\frac{1}{2}$	..	..	..
$\frac{3}{8}$ " $\frac{3}{4}$ "				4	5	6	7	8	9	13 $\frac{1}{2}$	15	16 $\frac{1}{2}$	18	19 $\frac{1}{2}$	21	22 $\frac{1}{2}$	..	..	..
$\frac{1}{2}$ " $1\frac{1}{8}$ "				10	12	14	16	18	20	27 $\frac{1}{2}$	30	32 $\frac{1}{2}$	35	37 $\frac{1}{2}$	40	42 $\frac{1}{2}$	45	47 $\frac{1}{2}$	50
$\frac{5}{8}$ " $1\frac{1}{8}$ "				10	12	14	16	18	20	27 $\frac{1}{2}$	30	32 $\frac{1}{2}$	35	37 $\frac{1}{2}$	40	42 $\frac{1}{2}$	45	47 $\frac{1}{2}$	50
$\frac{3}{4}$ " $1\frac{3}{4}$ "				12 $\frac{1}{2}$	15	17 $\frac{1}{2}$	20	22 $\frac{1}{2}$	25	33	36	39	42	45	48	51	54	57	60
1 " $1\frac{3}{4}$ "				12 $\frac{1}{2}$	15	17 $\frac{1}{2}$	20	22 $\frac{1}{2}$	25	33	36	39	42	45	48	51	54	57	60
$1\frac{1}{4}$ " $2\frac{1}{8}$ "				15	18	21	24	27	30	38 $\frac{1}{2}$	42	45 $\frac{1}{2}$	49	52 $\frac{1}{2}$	56	59 $\frac{1}{2}$	63	66 $\frac{1}{2}$	70
$1\frac{1}{2}$ " $2\frac{1}{8}$ "				15	18	21	24	27	30	38 $\frac{1}{2}$	42	45 $\frac{1}{2}$	49	52 $\frac{1}{2}$	56	59 $\frac{1}{2}$	63	66 $\frac{1}{2}$	70

Add 25 per cent. to the above for glazed tubes.



### Large China Tubes, with Long Heads.

We carry the following sizes with heads 3 inches long, which can be used advantageously where water or sweepings are liable to come into contact with wires. In ordering always give both outside and inside diameter.

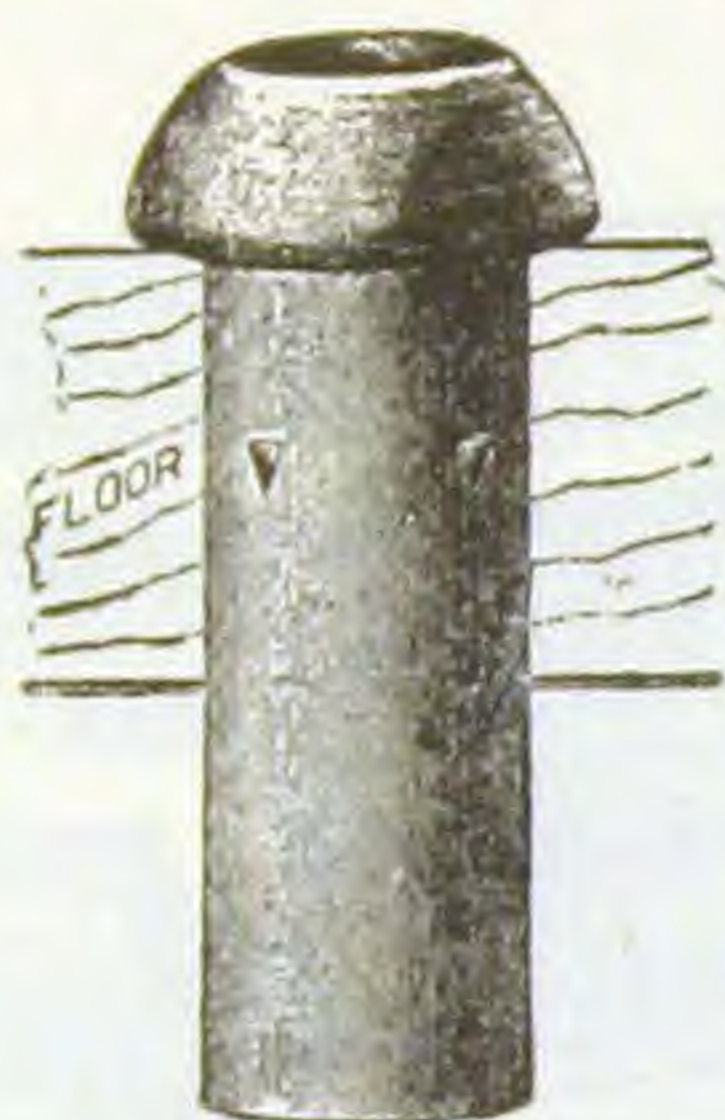
#### PRICE LIST OF EACH SIZE, IN CENTS.

Length under Head in Inches—				5	6	7	8	9	10	11	12	13	14	15	16	17
$\frac{5}{16}$ in. Hole, $\frac{5}{8}$ in. outside diam.				6	7	8	12 $\frac{1}{2}$	14	15 $\frac{1}{2}$	17	18 $\frac{1}{2}$	20	21 $\frac{1}{2}$	..	..	..
$\frac{3}{8}$ " $\frac{3}{4}$ "				7	8	9	13 $\frac{1}{2}$	15	16 $\frac{1}{2}$	18	19 $\frac{1}{2}$	21	22 $\frac{1}{2}$	..	..	..
$\frac{1}{2}$ " $1\frac{1}{8}$ "				16	18	20	27 $\frac{1}{2}$	30	32 $\frac{1}{2}$	35	37 $\frac{1}{2}$	40	42 $\frac{1}{2}$	45	47 $\frac{1}{2}$	50
$\frac{5}{8}$ " $1\frac{1}{8}$ "				16	18	20	27 $\frac{1}{2}$	30	32 $\frac{1}{2}$	35	37 $\frac{1}{2}$	40	42 $\frac{1}{2}$	45	47 $\frac{1}{2}$	50
$\frac{3}{4}$ " $1\frac{3}{4}$ "				20	22 $\frac{1}{2}$	25	33	36	39	42	45	48	51	54	57	60
1 " $1\frac{3}{4}$ "				20	22 $\frac{1}{2}$	25	33	36	39	42	45	48	51	54	57	60

Add 25 per cent. to the above for glazed tubes.



## INSULATING TUBES.



Cat. No. 10568.

## China Floor Tubes.

Cat. No.	China Floor Tubes.					Price.
10566	4 inches long,	$\frac{3}{4}$ inch hole,	each.....			\$0.09
10567	4	"	1	"	" .....	.09
10568	6	"	$\frac{3}{4}$	"	" .....	.12
10569	6	"	1	"	" .....	.12
10570	4	"	$1\frac{1}{4}$	"	" .....	.14
10571	4	"	$1\frac{1}{2}$	"	" .....	.14
10572	6	"	$1\frac{1}{4}$	"	" .....	.18
10573	6	"	$1\frac{1}{2}$	"	" .....	.18

**Porcelain Window Tube, with Curved End.**

This form of Window Tube has a curved end which effectually prevents any water entering through tube, and insures a compliance with the insurance rule requiring a "water loop" in wire. Use  $\frac{7}{8}$  inch bit.

10574	Glazed Window Tubes, curved ends, each.....	\$0.10
10575	Unglazed     "       "       "       " .....	.07

### Awning Insulator.

This Insulator is used where a wire passes over an awning or cornice, or around the corner of a building, to protect the insulation of the wire from abrasion.

10576	Awning Insulator, glazed, each.....	\$0.10
10577	"                    "            unglazed, each.....	.07
10578	$\frac{9}{16}$ inch hole, 18 inches long, each.....	.60



Cat. No. 10576.

## Floor Insulators.

### Glass Floor Insulators.

10579	3 in. Floor Ins.,	$\frac{1}{2}$ in. bore, with thread,	per M.,	\$70.00
10580	3	1	" "	70.00
10581	3	$1\frac{1}{4}$	" "	80.00
10582	$3\frac{1}{2}$	1	" "	75.00
10583	4	$\frac{3}{4}$	" "	80.00
10584	4	1	" "	80.00
10585	$4\frac{1}{2}$ in. Floor Ins.,	1 in. bore, with thread,	per M.,	\$90.00
10586	5	1	" "	100.00
10587	6	1	" "	120.00
10588	6	$1\frac{1}{4}$	" "	140.00
10589	$3\frac{1}{2}$	$\frac{3}{4}$	no thread,	75.00
10590	6	1	split thread,	200.00

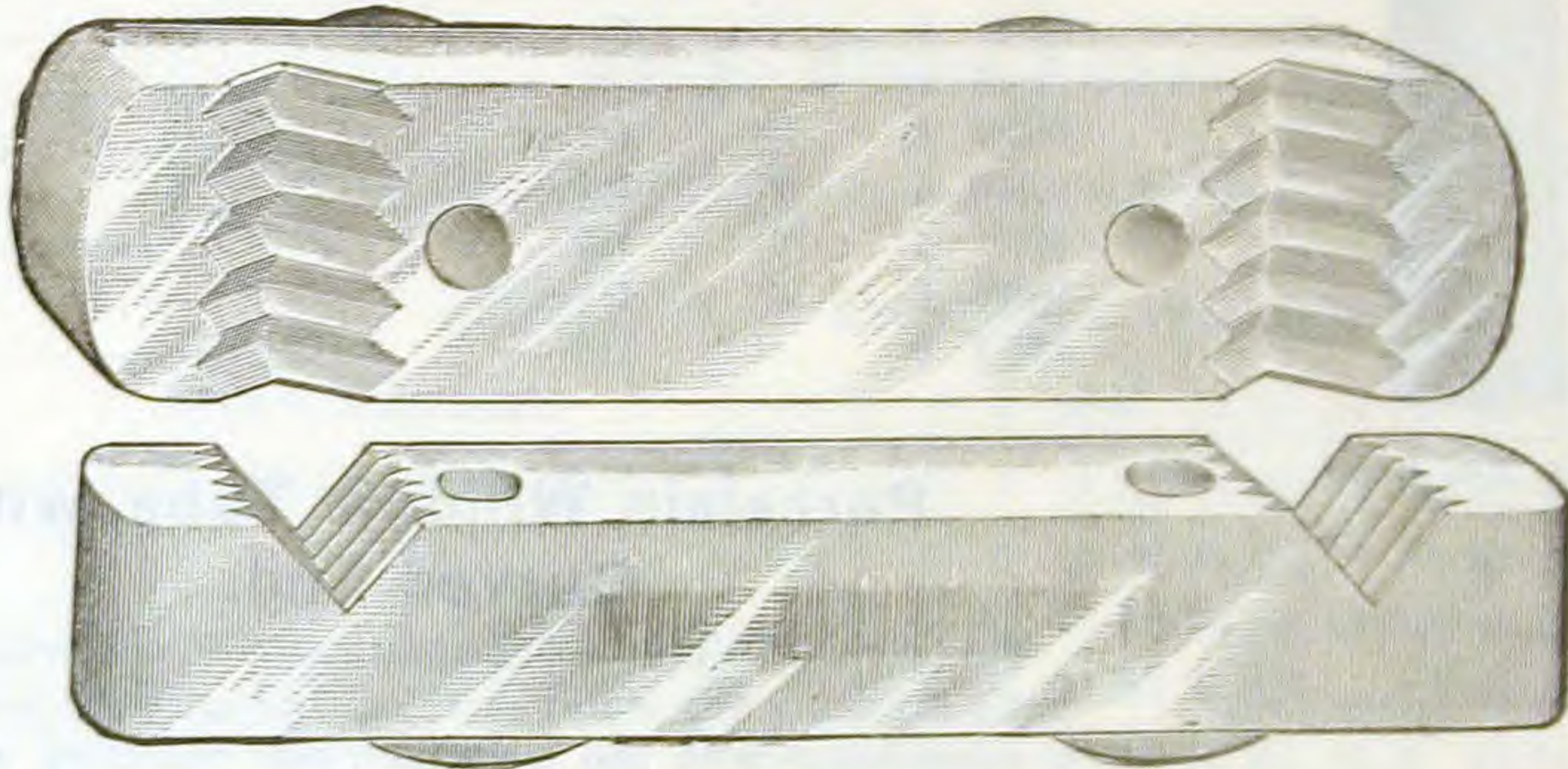


Cat. No. 10583.



## PORCELAIN CLEATS.

### Duggan Cleats.



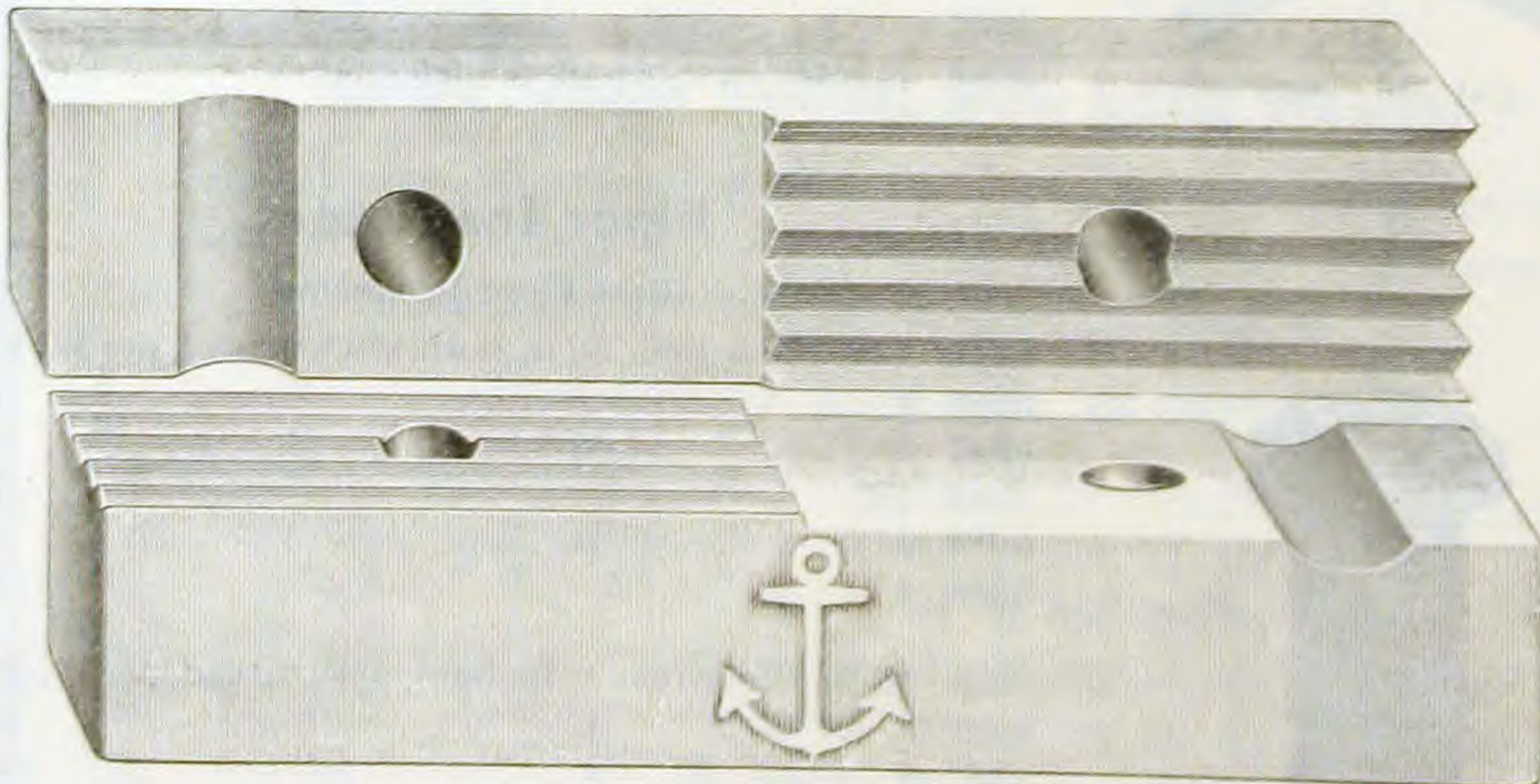
Cat. No. 10591.

Cat. No.

Price.

10591	Glazed, Two or Three-Wire, per M.....	\$30.00
10592	Unglazed, Two or Three-Wire, per M.....	20.00

### Anchor Cleat.

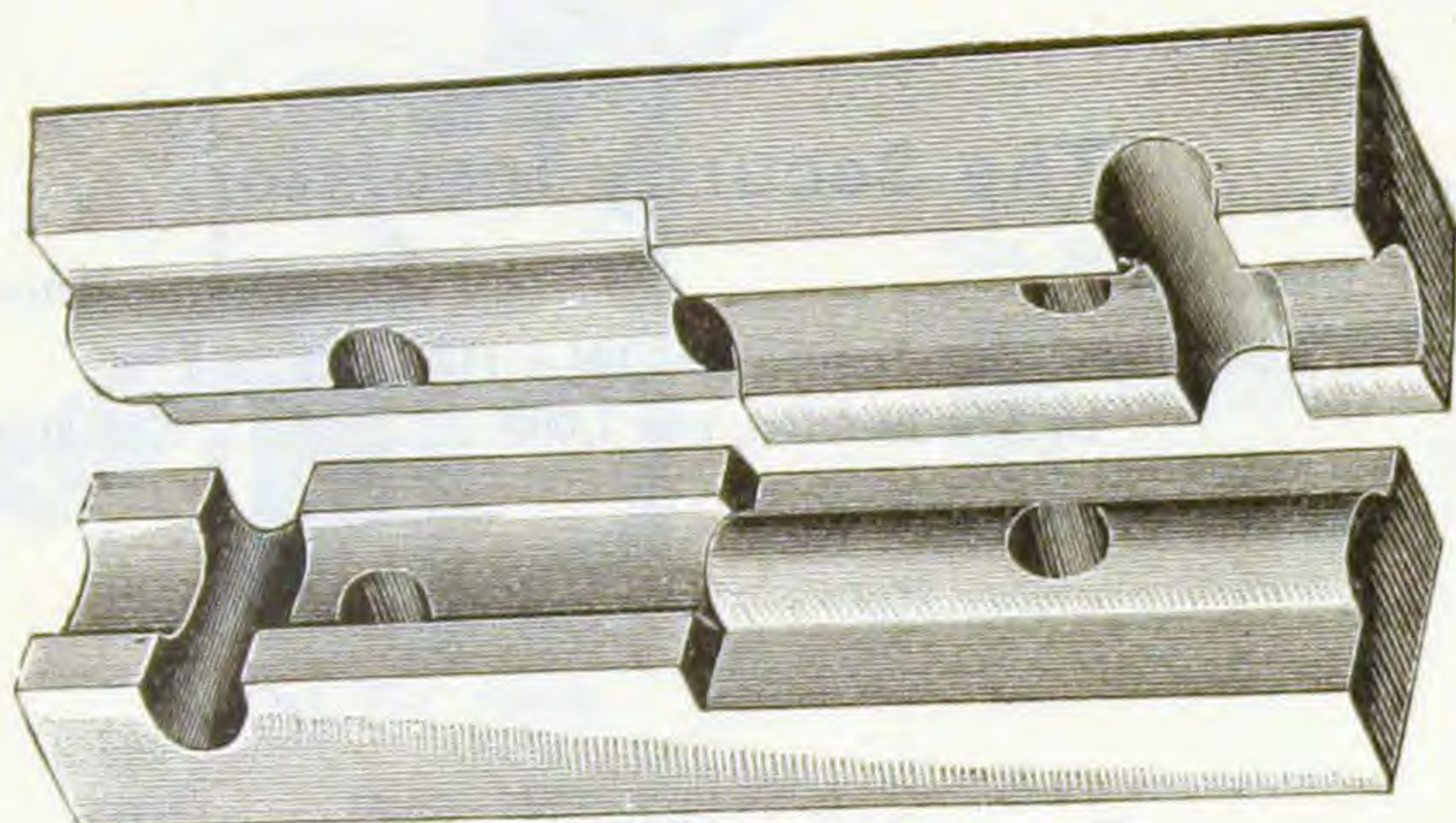


Cat. No. 10593.

10593	Anchor Cleats for all sizes wire, per M.....	\$30.00
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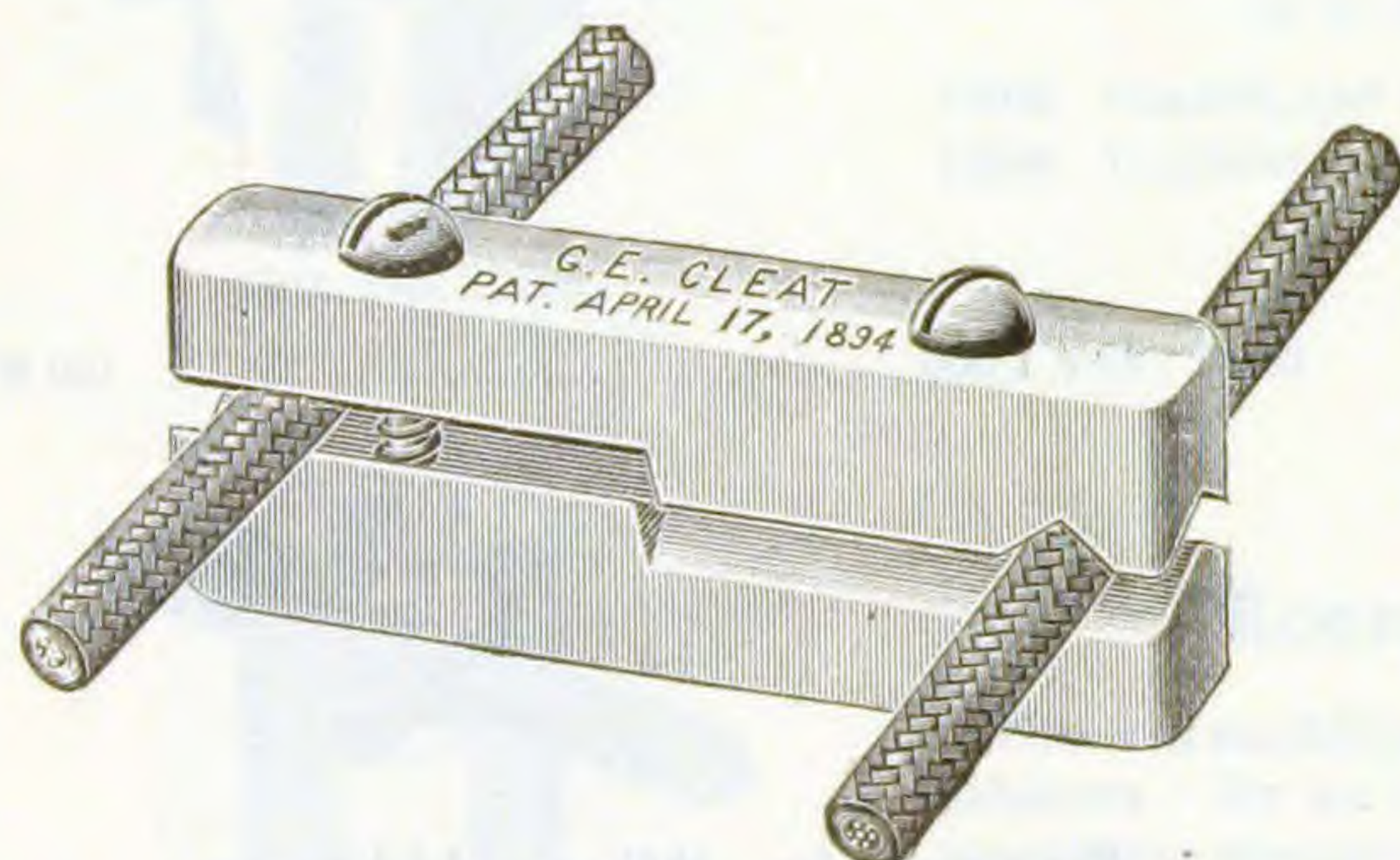
## PORCELAIN CLEATS.



Cat. No. 10594.

### B. & T. Cleat.

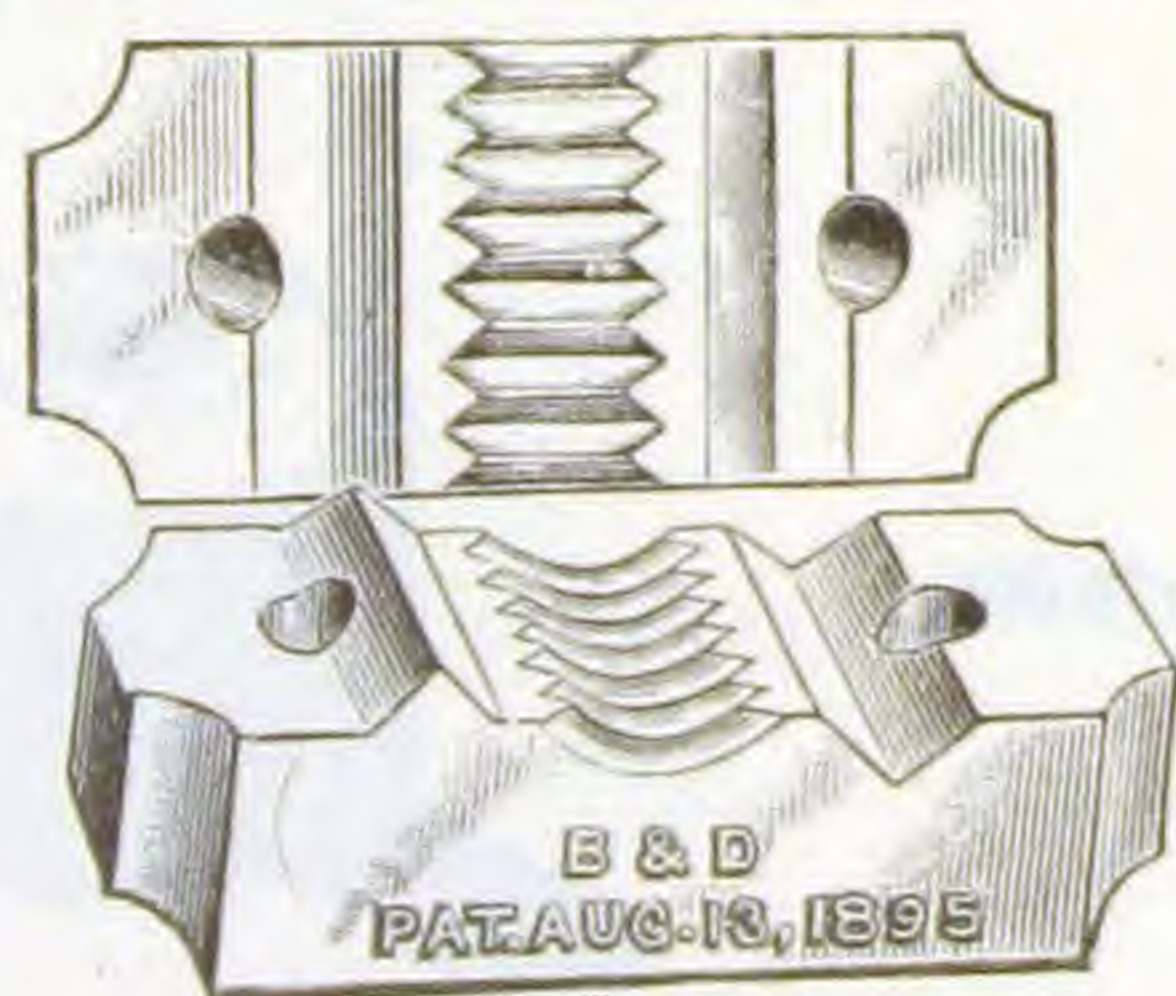
Cat. No.	Price.
10594 B. & T. Cleat, per M....	\$25.



Cat. No. 10595.

### G. E. Cleat.

10595	G. E. Cleat for wire up to $\frac{5}{16}$ in. diameter, per M.....	\$30.
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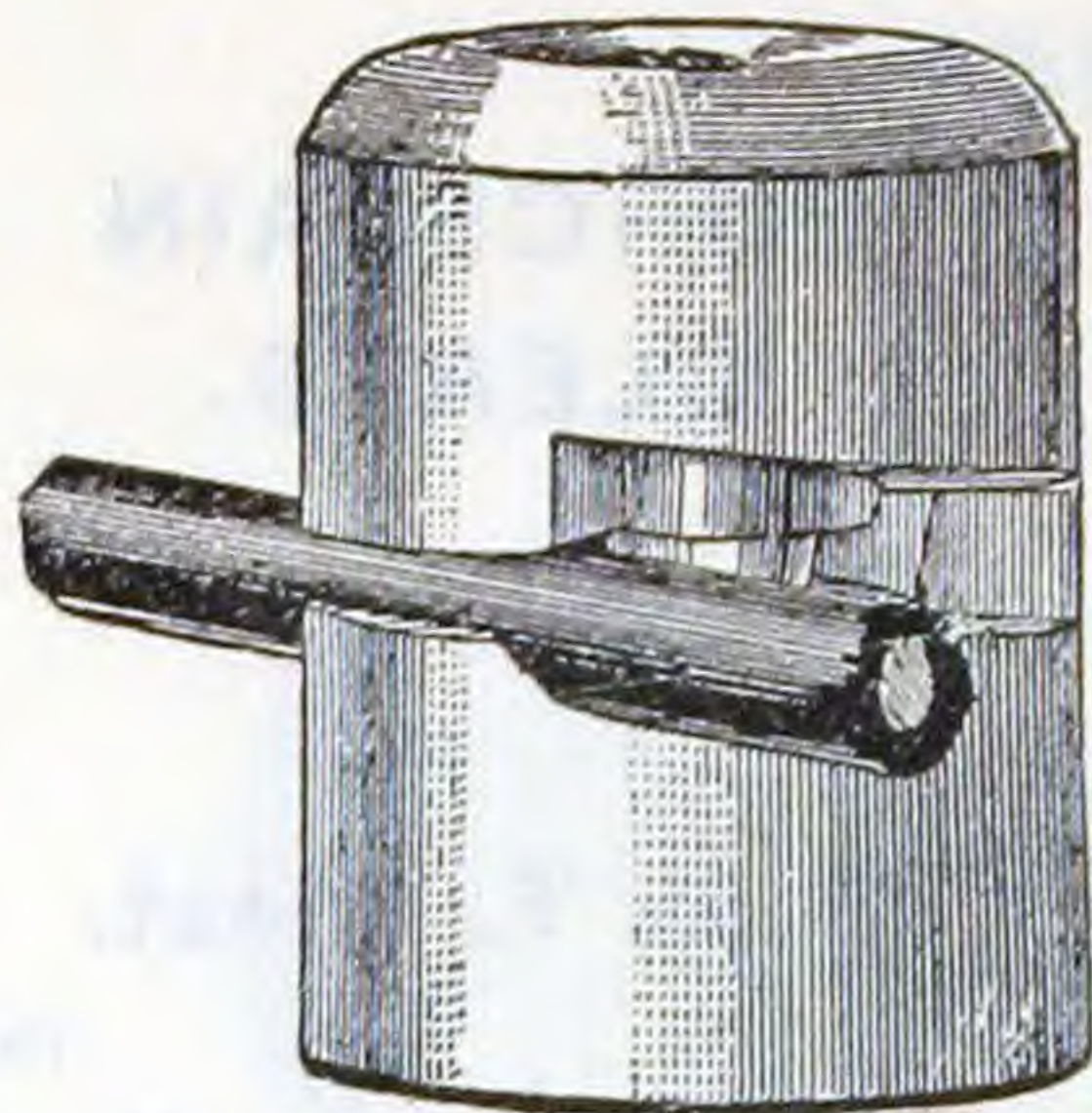


Cat. No. 10596.

### Special Cleat.

10596	Med. Wire Cleat, per M.	\$56.
10597	Large " " "	84.
10598	Cable " "	112.





Cat. No. 10599.

## PORCELAIN WIRE-HOLDERS.

### The Security Insulator.

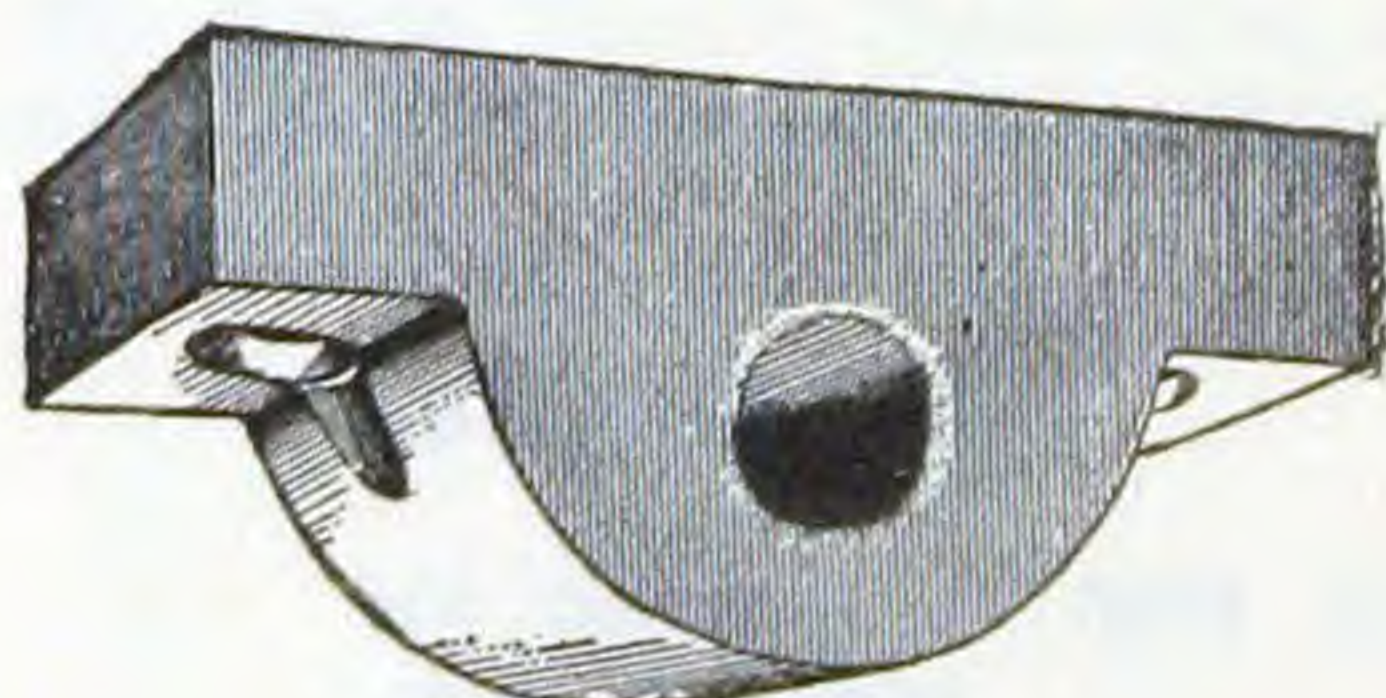
Cat. No.	Price.
10599	Security Insulator, $1\frac{3}{4}$ x $1\frac{1}{2}$ inch, No. 2 to No. 12 wire, per 1,000.....\$30.00



Cat. No. 10600.

### Porcelain Wire-Holders.

10600	Per 1,000.....	50.00
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Cat. No. 10601.

10601	Per 1,000.....	150.00
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Cat. No. 10602.

### Porcelain Wire-Holders.

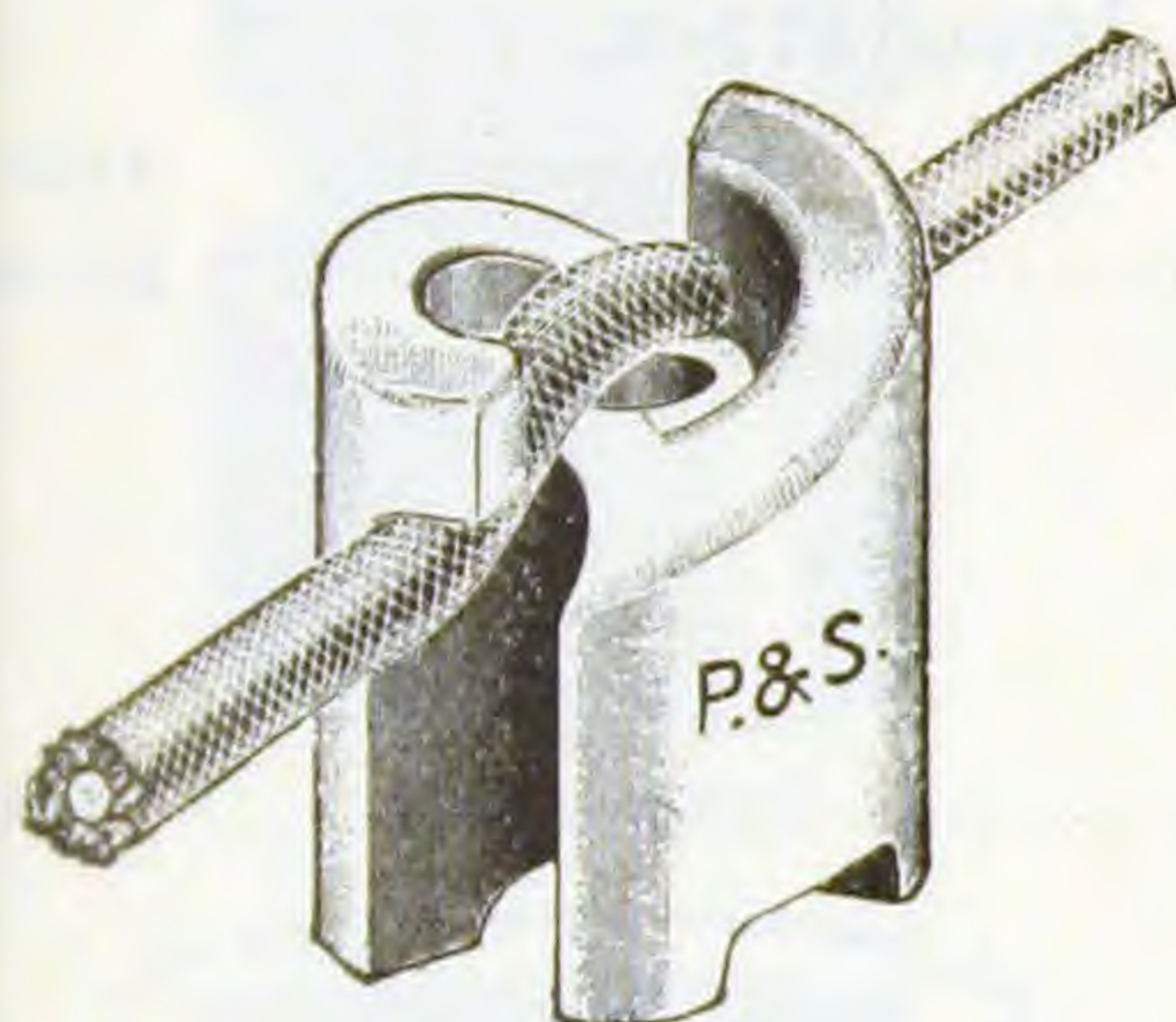
10602	Per 1,000.....	250.00
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Cat. No. 10603.

10603	Per 1,000.....	150.00
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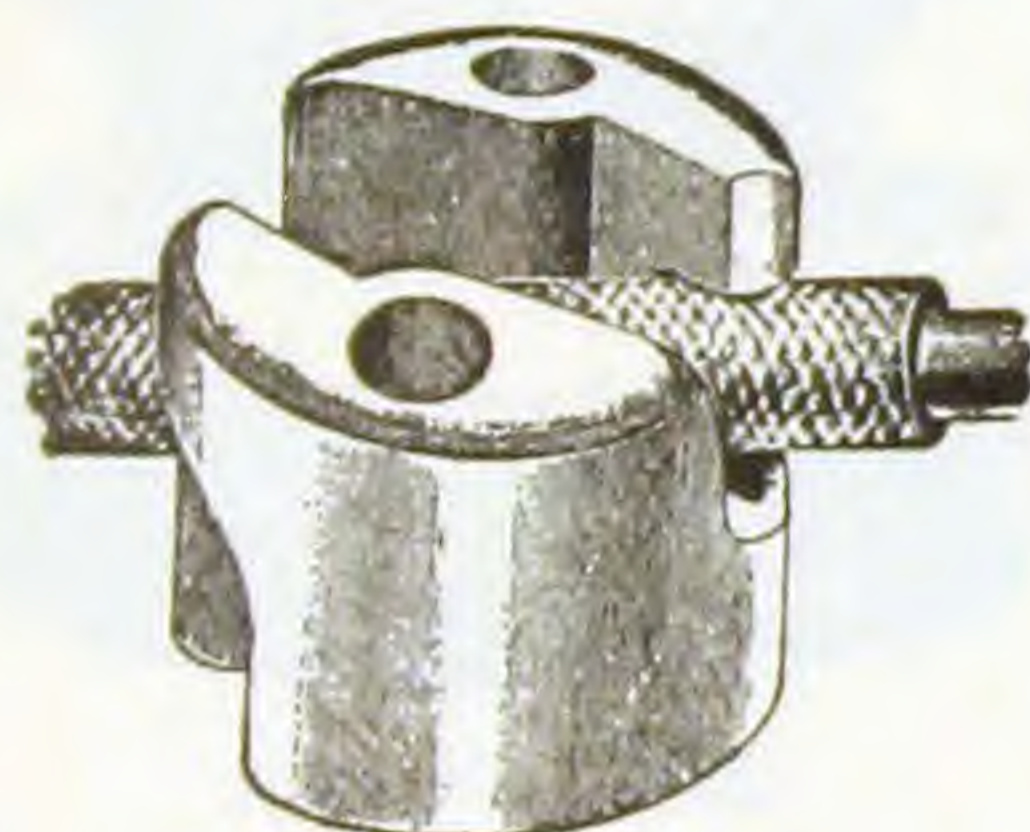


**PORCELAIN WIRE-HOLDERS.**

Cat. No. 10604.

**Wiring Insulator.**

Cat. No.		Price.
10604	Glazed for No. 6 and No. 8 wire, per 100.....	\$4.65
10605	Unglazed, " 6 " 8 " " .....	3.00
10606	Glazed, " 10 to No. 16 " " .....	3.70
10607	Unglazed, " 10 " 16 " " .....	2.35

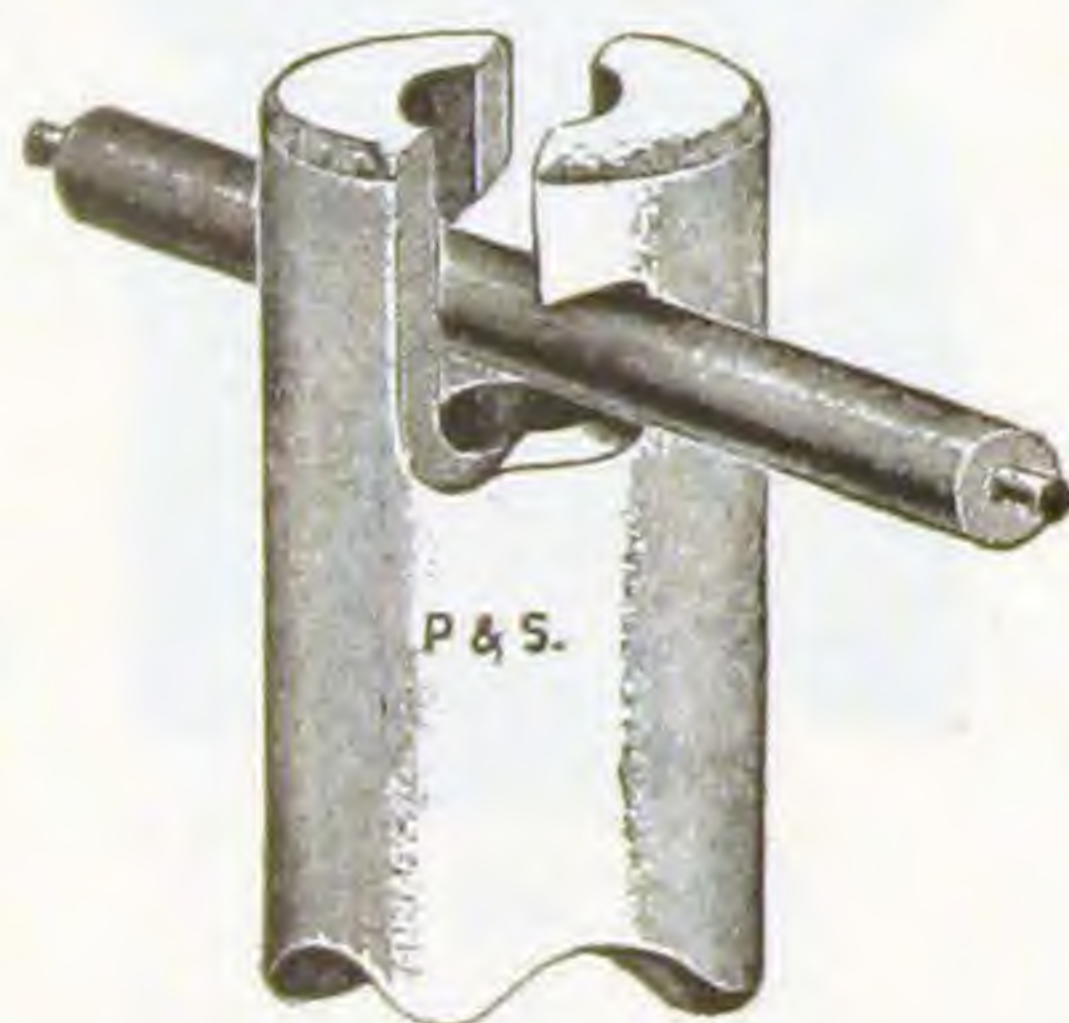


Cat. No. 10608.

**Wiring Insulator for Large Wires.**

The Insulator will hold insulated wires or cables from  
 $\frac{1}{2}$  to  $\frac{3}{4}$  inch outside diameter.

10608	Glazed, per 100.....	\$12.50
10609	Unglazed, per 100.....	7.50



Cat. No. 10610.

**"Economic" Insulators.**

This is a modification of Nos. 10604 and 10608 Wiring Insulators. By an improved construction it is, without sacrificing strength, made much smaller, and is therefore sold at a much lower price.

10610	For No. 1 wire and smaller, glazed, per 100...	\$3.00
10611	" 6 " " " " " .....	2.00



Cat. No. 10612.

10612	Insulating Knob for wire, $\frac{1}{2}$ in. diam., per 100,	3.00
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# Porcelain Insulators.



Cat. No. 10613.

Cat. No.

10613	Per 1,000.....	Price.	\$10.00
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Cat. No. 10614.

10614	Per 1,000.....	Price.	10.00
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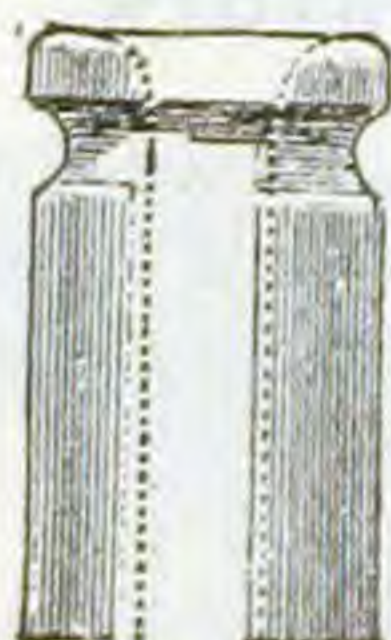
Cat. No. 10615.

10615	Per 1,000.....	Price.	10.00
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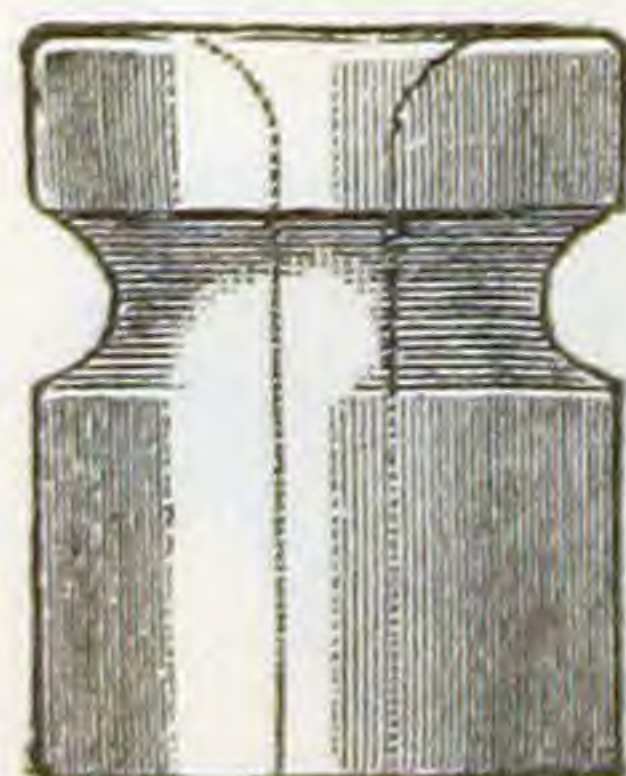
Cat. No. 10616.

10616	Per 1,000.....	Price.	10.00
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Cat. No. 10617.

10617	Per 1,000.....	Price.	12.00
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Cat. No. 10618.

10618	Per 1,000.....	Price.	15.00
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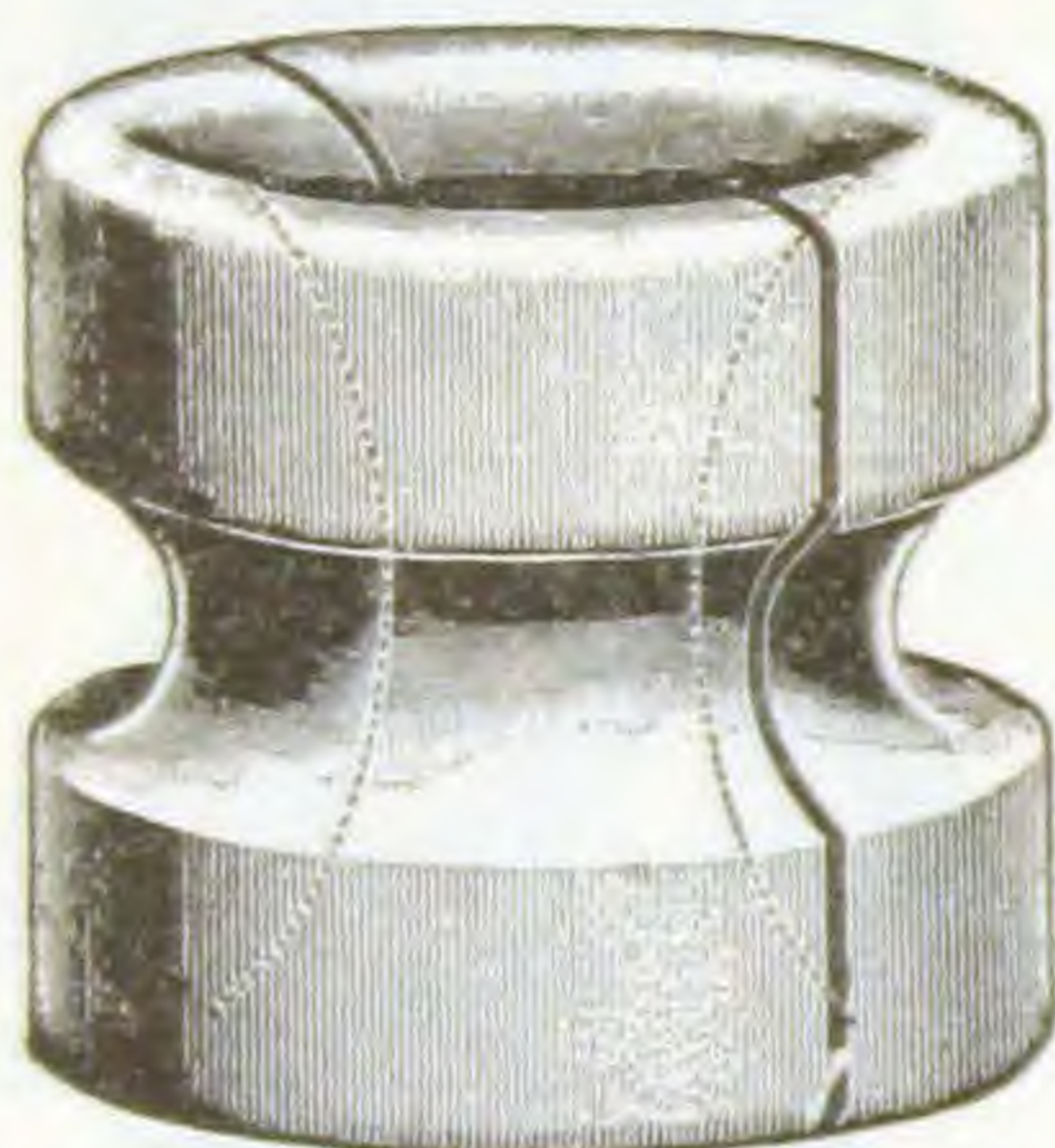
# Porcelain Insulators.

Cat. No.	Price.
10619 Per 1,000.....	\$18.00



Cat. No. 10619.

10620 Split, per 1,000.....	70.00
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Cat. No. 10620.

10621 Per 1,000.....	25.00
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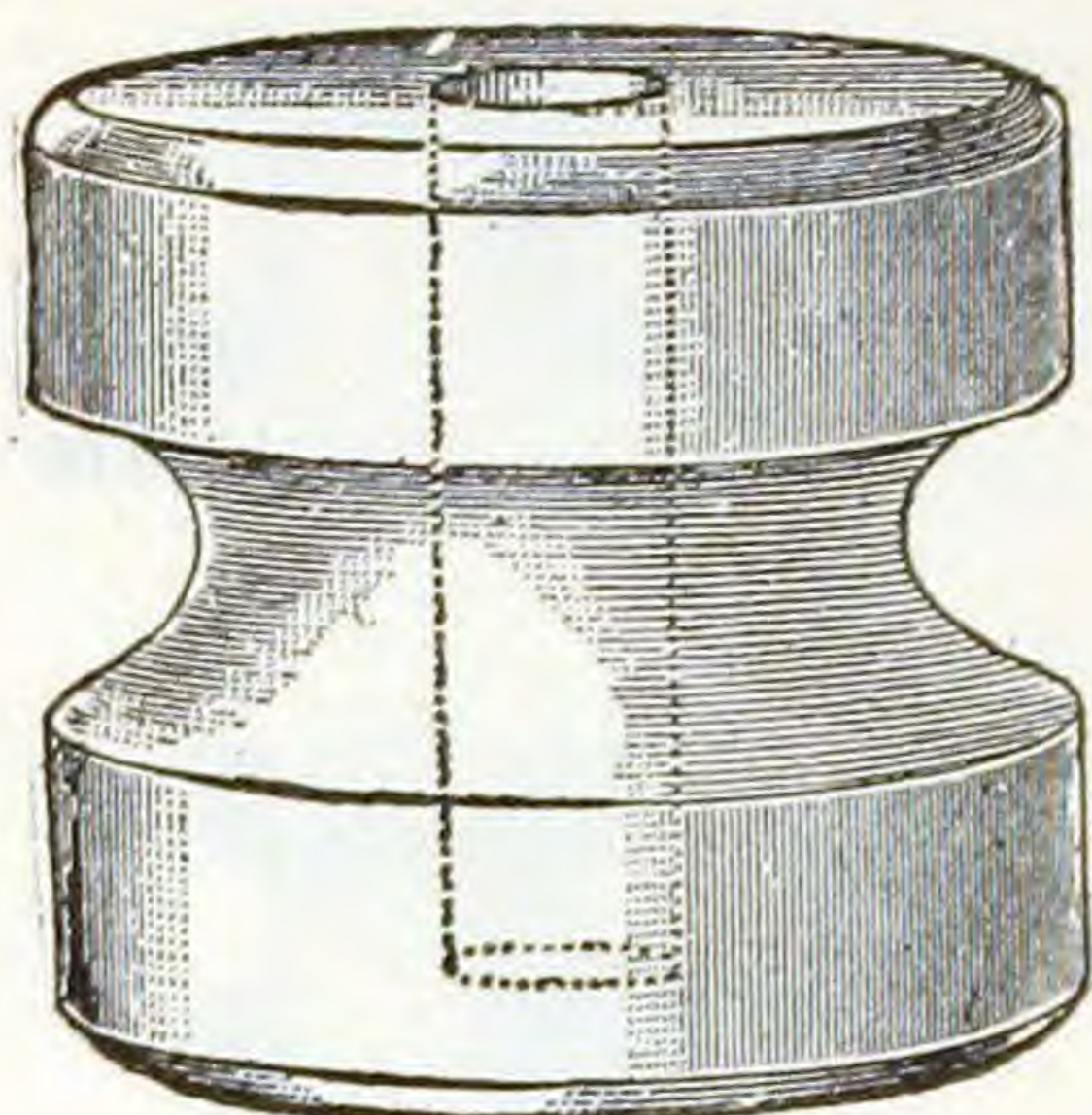
Cat. No. 10621.

10622 Per 1,000.....	50.00
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Cat. No. 10622.

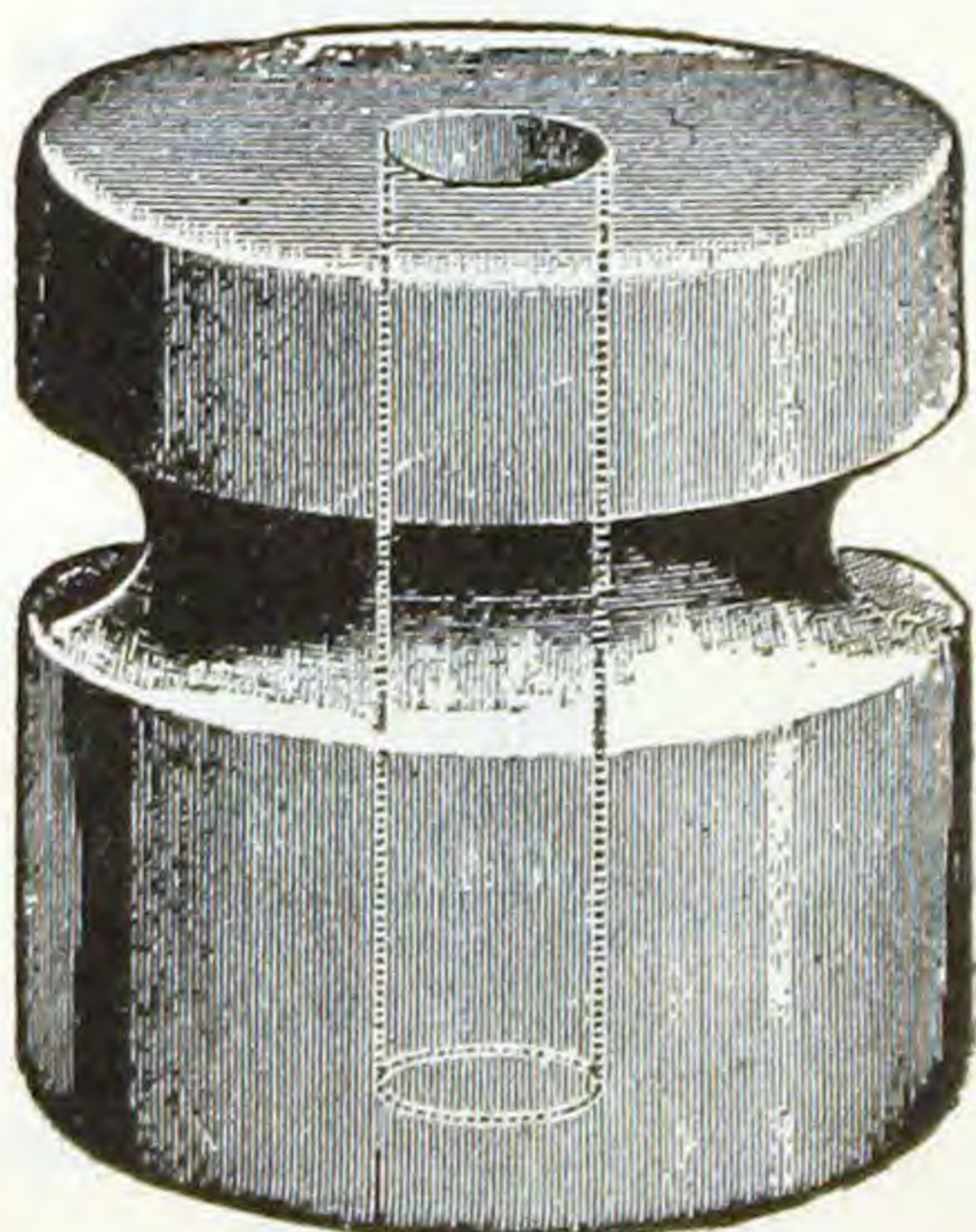




Cat. No. 10623.

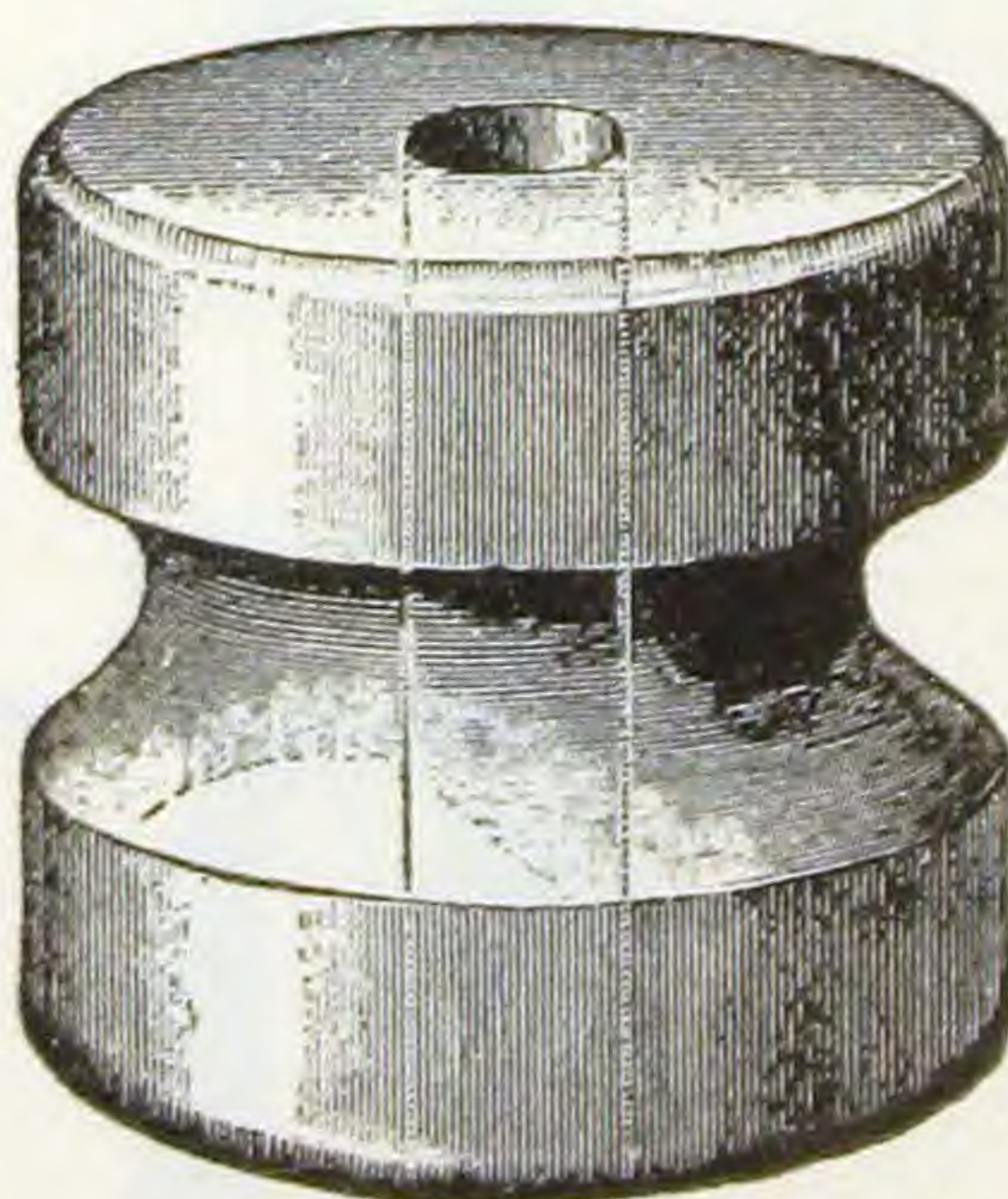
### Porcelain Insulators.

Cat. No.	Price.
10623 Per 1,000.....	\$50.00



Cat. No. 10624.

10624 Per 1,000.....	45.00
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Cat. No. 10625

10625 Per 1,000.....	70.00
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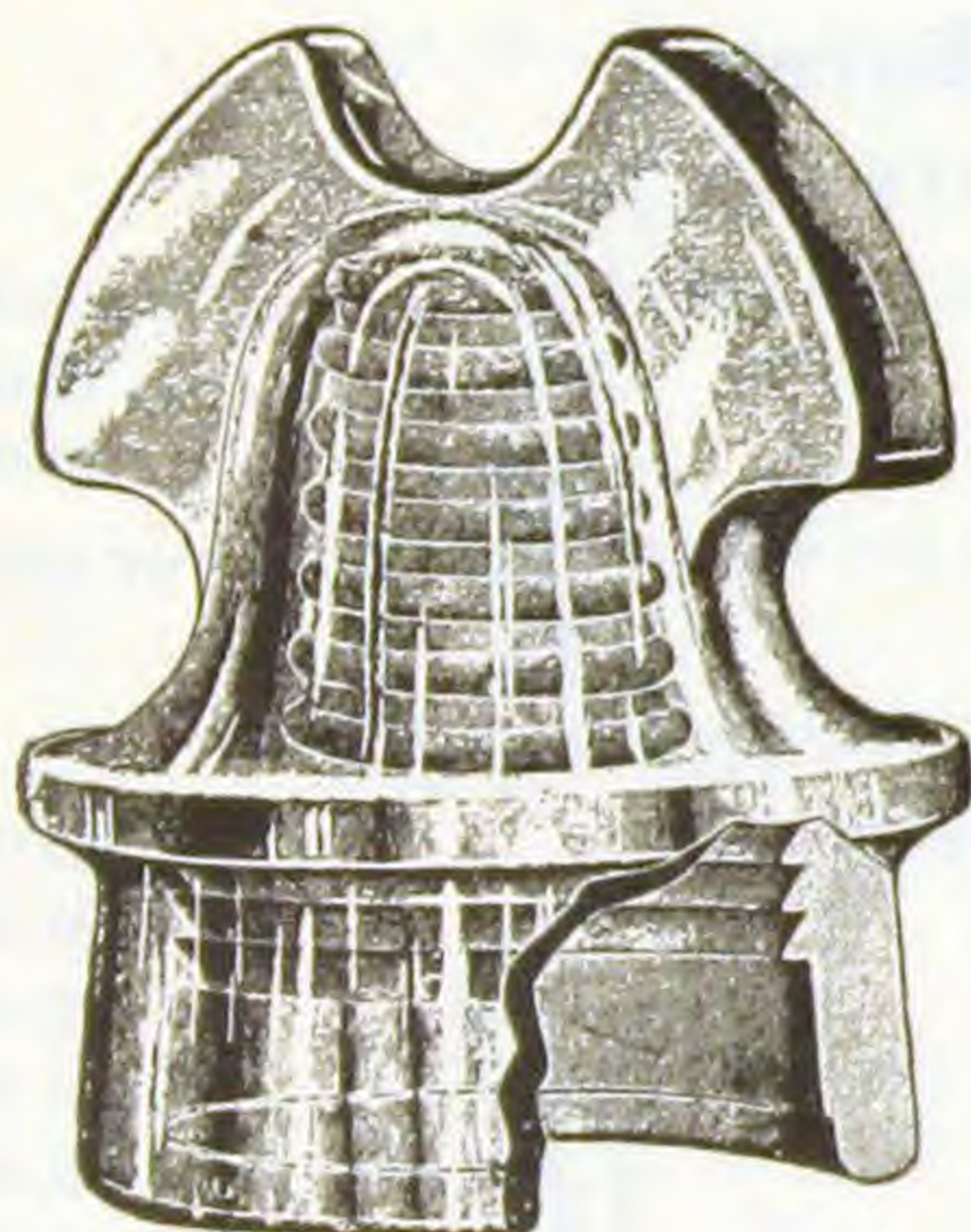




Cat. No. 10626.

### Glass Insulators.

Cat. No.	Price.
10626 Extra D. G., D. P., per 1,000.....	\$50.00
Packed 165 in a barrel.	



Cat. No. 10627.

10627 Cable Glass Insulator, per 1,000.....	140.00
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Cat. No. 10628.

10628 Double Groove Glass Insulator, per 1,000.....	82.00
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Cat. No. 10629.



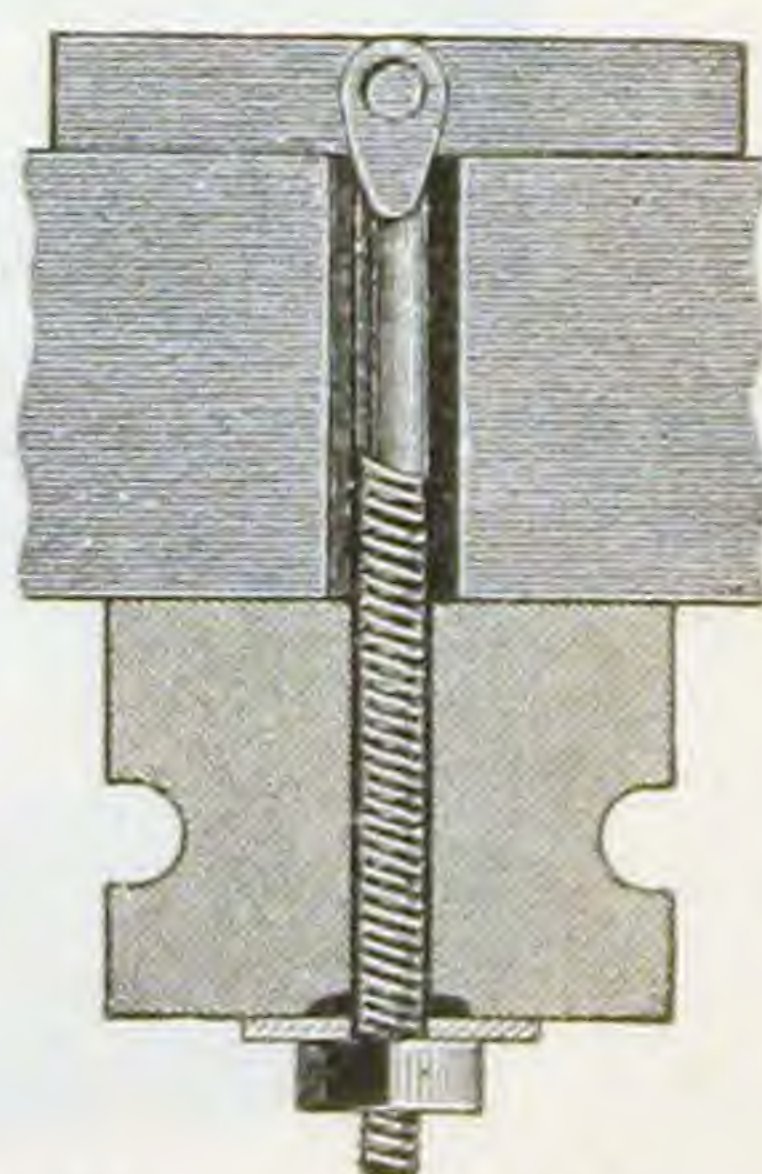
Cat. No. 10630.



Cat. No. 10633.



Cat. No. 10642.



Cat. No. 10644.

## WIRE-HOLDERS AND TOGGLES.

## "Jumbo" Wire-Holders.

### OPALESCENT GLASS INSULATION.

The Fletcher "Jumbo" Wire-Holder is sufficiently strong to support a heavy cable, and adds materially to the neat appearance of wiring work.

Cat. No.	Price.
10629 1 inch opening, per 100.....	\$25.00

### Gem Wire-Holders, with Wood Screw.

## PORCELAIN INSULATION.

10630	$\frac{3}{16}$	inch opening, per 100	\$10.00
10631	$\frac{1}{4}$	" " " "	10.00
10632	$\frac{3}{8}$	" " " "	15.00

These Wire Holders are suitable for indoor or outdoor use.

## OPALESCENT GLASS INSULATION

10633	1/2 inch opening, per 100.				\$20.00
10634	5/8	1/2	3/4	1	20.00
10635	3/4	1/2	3/4	1	25.00
10636	7/8	1/2	3/4	1	25.00
10637	1	1/2	3/4	1	25.00
10638	1 1/4	1/2	3/4	1	50.00
10639	1 1/2	1/2	3/4	1	60.00
10640	1 3/4	1/2	3/4	1	75.00
10641	2	1/2	3/4	1	85.00

## WOOD INSULATION.

The Fletcher Gem Wire-Holders, with wood insulation, are suitable for every description of inside work, but are not recommended for outdoor use.

10642	$\frac{3}{8}$ " inch opening, per 100.....	\$8.33
10643	$\frac{1}{4}$ " " " ....."	10.00

## Toggles.

For suspending fixtures, brackets, wood blocks, etc., to side walls or ceiling.

10644	Brass, each.....	\$0.15
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**INSULATORS.****Circuit Breaker.**

Cat. No. 10645.

The construction of this Circuit Breaker is such as to insure high insulation and great strength. We furnish a large size for electric light wires, and smaller size for electric railway span wires, guard wires, curves, etc.

Cat. No.	Price.
10645 Small size, per 100.....	\$ 6.66
10646 Large " " .....	10.00



Cat. No. 10647.

10647 "Victor" Split Insulator, per 100.....	10.00
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Cat. No. 10648.

10648 Rubber Hook Insulator, each.....	.15
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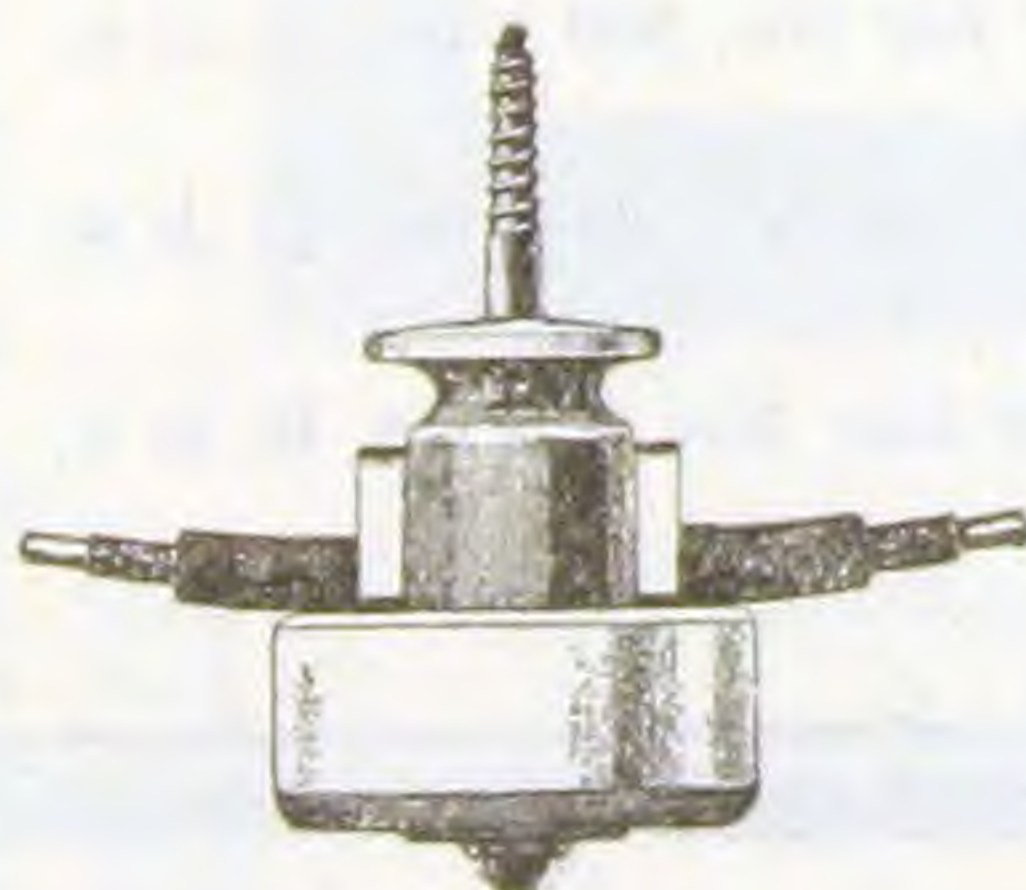


Cat. No. 10649.

10649 Seely Hook (pigtail) Insulator, small, each..	.12
10650 " " " " large, " ..	.15

**The "Safety" Wire-Holder.**

Made in three sizes, Nos. 1, 2 and 3, to take wire as follows: No. 1 takes from No. 18 to No. 12 B. & S gauge; No. 2 takes from No. 12 to No. 6 B. & S. gauge; No. 3 takes from No. 6 to No. 0 B. & S. gauge. They are furnished with different screws to suit the class of work required, viz., No. A, 1 inch wood screw for wood work; No. B, 1½ inch wood screw for plastered ceiling; No. C, ¼ inch machine screw for iron work.



Cat. No. 10651.

10651 No. 1, with 1 inch wood screw, per 100.....	\$10.00
10652 " 2, " 1 " " " " .....	10.00
10653 " 1, " 1½ " " " " .....	10.00
10654 " 2, " 1½ " " " " .....	10.00
10655 " 1, " ¼ " machine screw, " .....	10.00
10656 " 2, " ¼ " " " " .....	10.00
10657 " 3, " 1 " wood screw, " .....	15.00
10658 " 3, " 1½ " " " " .....	15.00
10659 " 3, " ¼ " machine screw, " .....	15.00

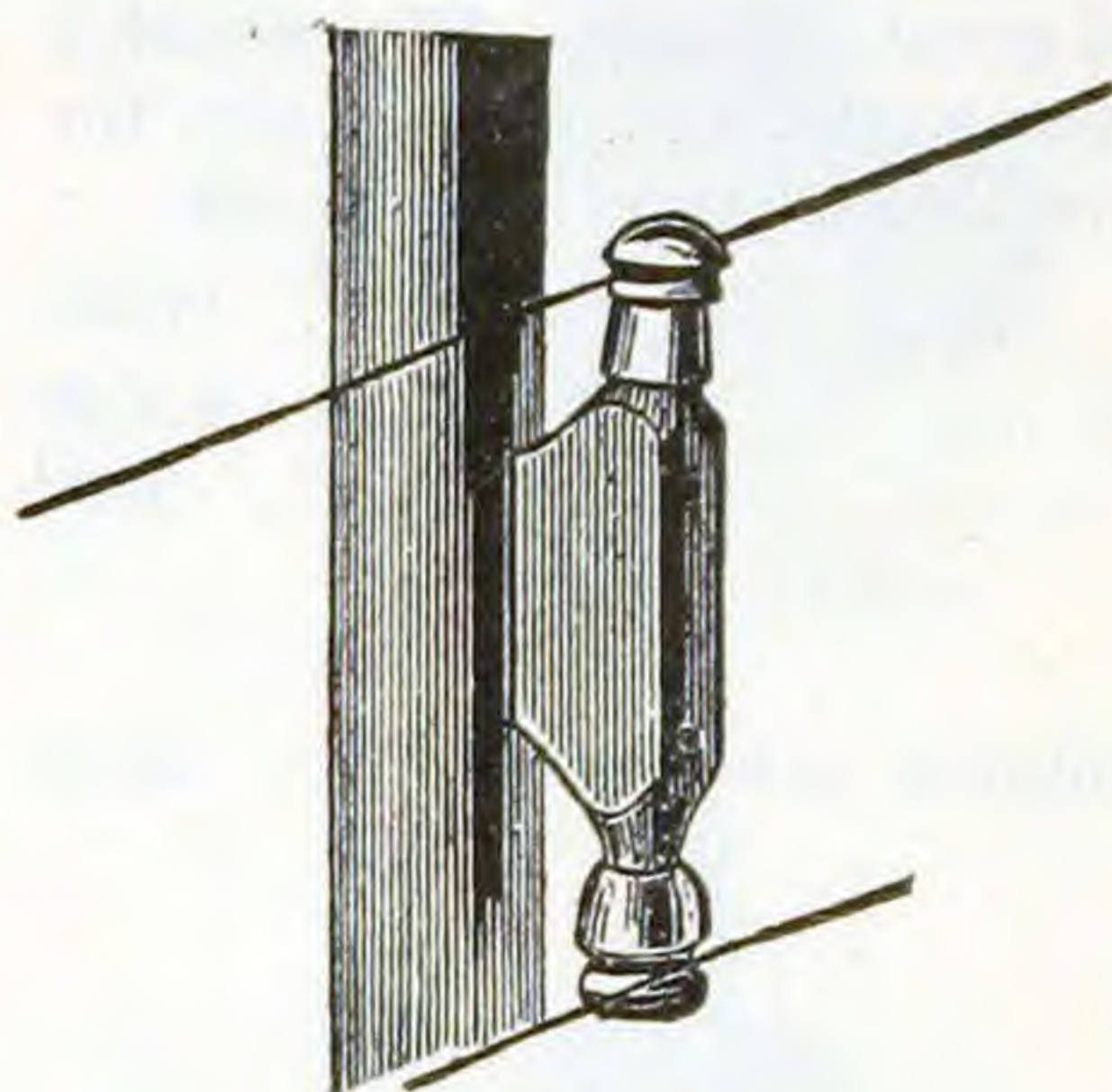


## LINE MATERIAL.

### Brackets.



Cat. No. 10660.



Cat. No. 10662.



Cat. No. 10663.



Cat. No. 10667.



Cat. No. 10669.



Cat. No. 10671.



Cat. No. 10679.



Cat. No. 10672.

Cat. No.	Price.
10660 Standard, 12 inch, Painted Oak Bracket, packed in crates of 500 each, per 1,000.....	\$20.00
10661 Standard, 12 inch, Locust Bracket, not painted, per 1,000.....	35.00
10662 Brown Duplex Bracket, per 1,000.....	35.00

### Pins.

10663 Standard, 1 1/4 inch, Painted Oak Pin, in crates of 500, per 1,000.....	\$18.00
10664 Standard, 1 1/2 inch, Painted Oak Pin, in crates of 500, per 1,000.....	18.00
10665 1 1/4 inch Locust Pin, not painted, in crates of 500, per 1,000.....	30.00
10666 1 1/2 inch Locust Pin, not painted, in crates of 500, per 1,000.....	30.00
10667 Brown Duplex Pin, 1 1/2 inch, Oak, per 1,000..	25.00
10668 " " " 1 1/2 " Locust, " ..	35.00
10669 Corner Pin, 1 1/2 inch, Oak, each.....	.07
10670 " " 1 1/2 " Locust, each.....	.10
10671 1 1/2 inch Solid Iron Pin, each.....	.20

### McIntire Patent Wire Connectors.

10672 Twist Connector for No. 4 wire, B. & S. gauge, per 1,000 .....	\$19.00
10673 Twist Connector for No. 6 wire, B. & S. gauge, per 1,000.....	17.00
10674 Twist Connector for No. 8 wire, B. & S. gauge, per 1,000.....	11.50
10675 Twist Connector for No. 10 wire, B. & S. gauge, per 1,000.....	10.50
10676 Soldered Connector for No. 0000 wire, B. & S. gauge, per 1,000.....	52.50
10677 Soldered Connector for No. 000 wire, B. & S. gauge, per 1,000.....	52.50
10678 Soldered Connector for No. 00 wire, B. & S. gauge, per 1,000.....	52.50
10679 Soldered Connector for No. 0 wire, B. & S. gauge, per 1,000 .....	42.00



**LINE MATERIAL.****Painted Cross Arms.**

3 1/4 x 4 1/4 Inches.



Cat. No. 10682.



Cat. No. 10692.



Cat. No. 10700.

**Washers.**

10700	1/2 in.	Iron Washers, per 100...	\$0.15
10701	5/8 in.	" " " " " " " " " " " "	.40

Cat. No.	Length.	Number of Pins.	Size of Pin Holes.	Weight.	Price.
10680	2 feet.	2	1 1/2 in.	6 lbs.	\$0.18
10681	3 "	2	1 1/2 "	9 "	.20
10682	4 "	4	1 1/2 "	12 "	.25
10683	5 "	4	1 1/2 "	15 "	.30
10684	6 "	4	1 1/2 "	18 "	.35
10685	6 "	6	1 1/2 "	18 "	.40
10686	8 "	6	1 1/2 "	24 "	.45
10687	8 "	8	1 1/2 "	24 "	.50
10688	8 "	10	1 1/2 "	24 "	.52
10689	9 "	10	1 1/2 "	27 "	.55
10690	10 "	8	1 1/2 "	30 "	.60
10691	10 "	10	1 1/2 "	30 "	.65

Above Arms are of best Michigan White Pine. Special prices quoted on Yellow Pine Arms and Extra Heavy Arms.

**Cross Arm Braces.**

10692	Standard Cross Arm Braces, per pair,	\$0.20
10693	" " " " " " complete, with lag screws, carriage bolts and washers, per pair.....	.30



Cat. No. 10696.



Cat. No. 10699.



Cat. No. 10702.

**Lag Screws.**

Cat. No.	Price per 100.
10694 2x1 1/2 Lag Screw..	\$0.50
10695 3x1 1/2 " " " "	.60
10696 5x1 1/2 " " " "	1.10
10697 7x1 1/2 " " " "	1.50
10698 7x5/8 " " " "	1.75

10699	4x1 1/2 Standard Carriage Bolt, per 100.....	1.30
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**Lag Screw Wrench.**

10702	Lag Screw Wrenches, each.....	\$0.75
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**Pole Steps.**

Cat. No. 10703.

Cat. No.	Price.	Cat. No.	Price.
10703 8x1 1/2 F.D. Black Pole Steps, per 100,	\$6.50	10709 8x1 1/2 F.D. Galv. Pole Steps, per 100,	\$8.00
10704 9x1 1/2 " " " " " "	6.75	10710 9x1 1/2 " " " " " "	8.25
10705 10x1 1/2 " " " " " "	7.00	10711 10x1 1/2 " " " " " "	8.50
10706 8x5/8 " " " " " "	6.75	10712 8x5/8 " " " " " "	9.00
10707 9x5/8 " " " " " "	7.00	10713 9x5/8 " " " " " "	9.25
10708 10x5/8 " " " " " "	7.25	10714 10x5/8 " " " " " "	9.50



## LINE AND OFFICE PLIERS.

### Stubs' Side Cutting Pliers.



Cat. No. 10720.

Cat. No.		Price
10715	4 inch, per pair	\$0.90
10716	4½ " " "	.90
10717	5 " " "	.90
10718	6 " " "	1.00
10719	7 " " "	1.50
10720	8 " " "	2.00
10721	9 " " "	3.25

Nickel Plated, 30c. per pair extra, net.

### Vom Cleff's All Steel Pliers.

#### Side Cutting.



Cat. No. 10729.

10722	4 inch, per dozen	\$ 8.00
10723	4½ " " "	8.00
10724	5 " " "	8.00
10725	5½ " " "	9.00
10726	6 " " "	10.00
10727	6½ " " "	12.00
10728	7 " " "	14.00
10729	8 " " "	18.00
10730	9 " " "	22.00

#### Diagonal Cutting.



Cat. No. 10735.

10731	3 inch, per dozen	8.00
10732	3½ " " "	8.00
10733	4 " " "	8.00
10734	4½ " " "	8.00
10735	5 " " "	8.00
10736	5½ " " "	9.00
10737	6 " " "	10.00
10738	6½ " " "	11.50
10739	7 " " "	14.00
10740	8 " " "	18.00

### Rubber Handles for Pliers.



Cat. No. 10744.

10741	5 inch, per gross	17.00
10742	6 " " "	23.00
10743	7 " " "	28.80
10744	8 " " "	36.00

### Insulated Pliers.

#### Moulded Mica Insulation.



Cat. No. 10746.

10745	6 inch Safety Side Cutting Pliers, per doz.	25.00
10746	7 " " " " " "	33.00
10747	8 " " " " " "	40.00
10748	7 " " " Insulated Gas Pliers, "	15.00

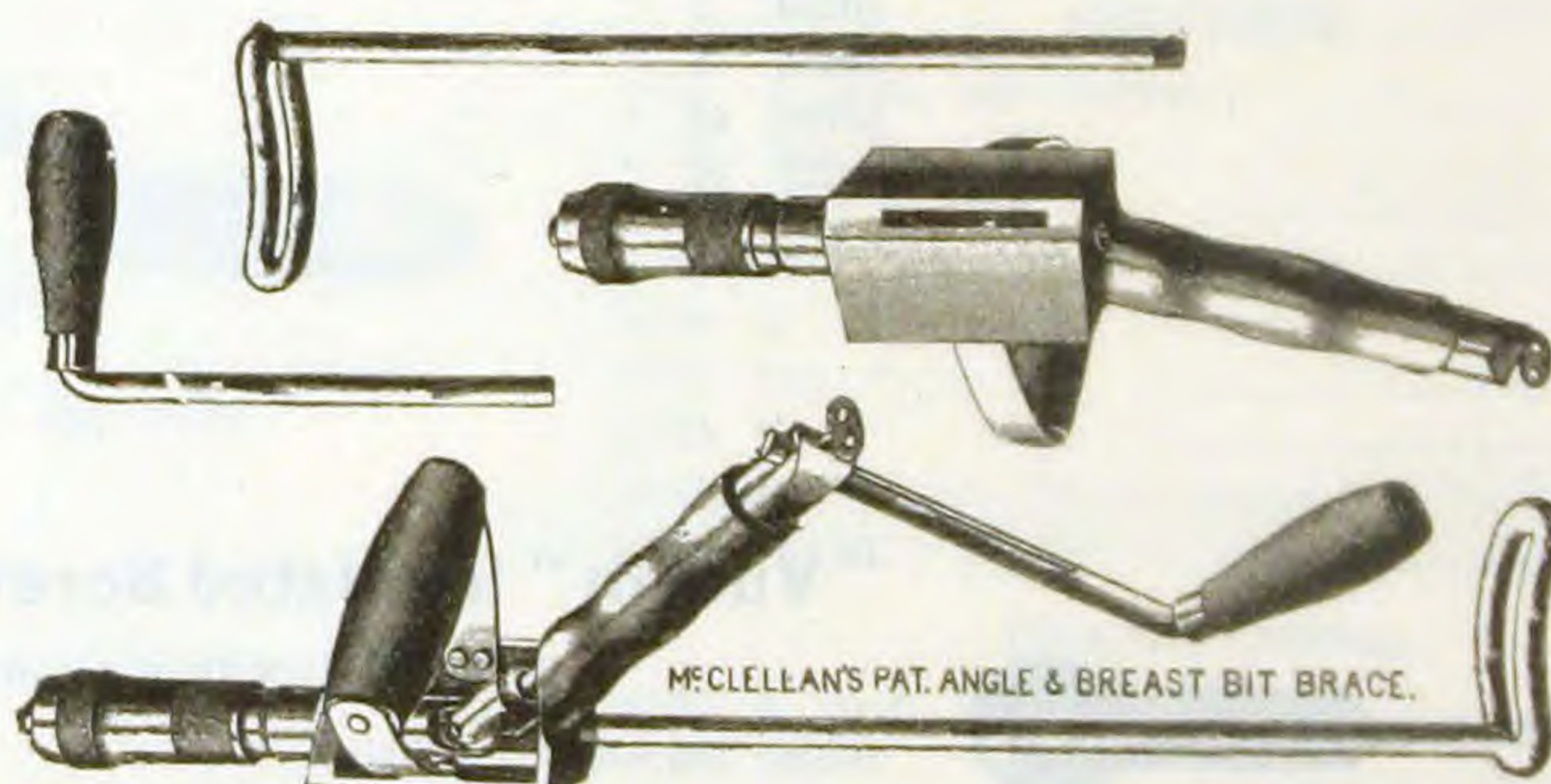






## The McClellan Patent Guide Frame Combination Angle and Breast Brace.

This brace is especially adapted to work where it would be impossible to bore a hole with any other tool, telephone, telegraph and electrical construction in general, car builders, plumbers, carpenters, etc., and wherever a brace is needed, being particularly useful for corner boring.



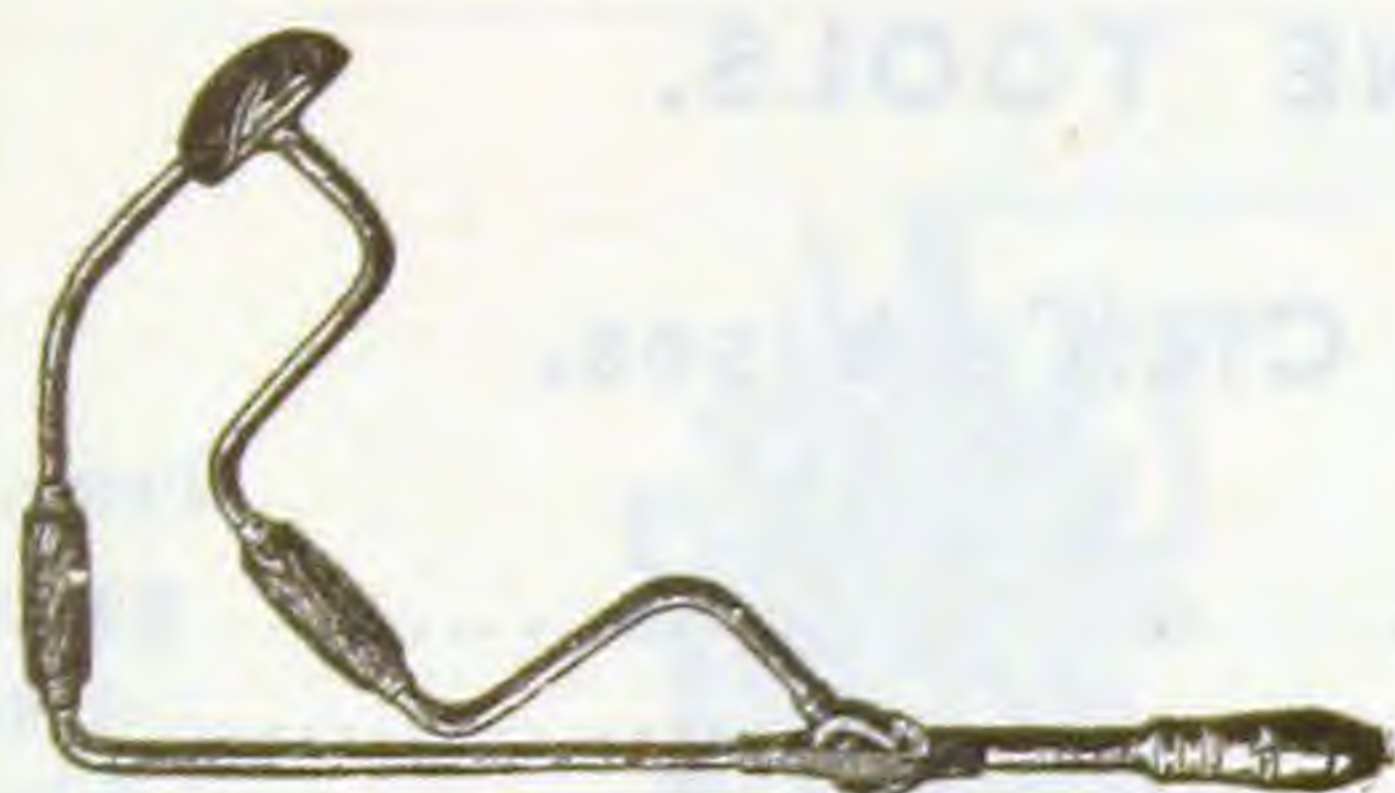
Cat. No. 10774.

It is a perfect breast brace for ordinary use, doing work more quickly and more accurately than any other brace on the market. It is the latest improved tool of its kind and will be greatly appreciated. Holes can be bored in a closer space than with any other brace, and are absolutely in line with point of rest of the angle. No wobbling about of brace when in use. Readily taken apart and put together. Breast rest is detachable, and can be taken out of the way when necessary to bore a hole in close quarters or between joists. Handle can be adjusted to have a sweep from 4 to 13 inches. Finest workmanship. Hard wood handle. Nickel-plated or japanned.

Cat. No.

10774	Each.....	Price.....
		\$2.50





Cat. No. 10775.

## LINE AND OFFICE TOOLS.

### Amidon's Patent Corner Bit Brace.

Cat. No.		Price.
10775	6 inch Sweep, each.....	\$3.00
10776	8 " " " ".....	3.35
10777	10 " " " ".....	3.75



Cat. No. 10778.

### Braces—Ratchet.

10778	7 inch Sweep, per doz.....	\$28.80
10779	8 " " " ".....	32.40
10780	10 " " " ".....	36.00
10781	12 " " " ".....	39.60
10782	14 " " " ".....	43.20



Cat. No. 10783.

### Braces—Plain.

10783	6 inch Sweep, per doz.....	\$10.80
10784	8 " " " ".....	10.80
10785	10 " " " ".....	12.25
10786	12 " " " ".....	13.68



Cat. No. 10787.

### Saws.

10787	14 inch Panel Saw, per doz.....	\$16.00
10788	16 " " " ".....	17.35
10789	18 " " " ".....	18.75
10790	20 " " " ".....	20.00
10791	22 " " " ".....	21.50
10792	24 " " " ".....	22.75



Cat. No. 10793.

### Hatchets.

10793	Width of Bit, 6 inch, per doz.....	\$20.75
10794	" " 6½ " ".....	22.50
10795	" " 7 " ".....	24.50
10796	" " 7½ " ".....	27.50



## LINE TOOLS.

### Vom Cleff's Vises.



Cat. No. 10798.

Cat. No.		Price.
10797	5½ inch, each.....	\$2.50
10798	6 " " ".....	4.00
10799	5½ " Copper Face, each. ....	3.50
10800	6 " " " " ".....	5.00
10801	Vise Straps, each.....	1.00



Cat. No. 10802.

### "Come-Along" Eccentric.

10802	For No. 9 Wire, each.....	1.00
10803	For No. 3 Wire, each.....	2.00
10804	For No. 000 Wire, each.....	2.00



Cat. No. 10806.

### Klein's Plain Eccentric.

10805	Brass, each.....	1.25
10806	Steel, each.....	1.10



Cat No. 10807.

### Haven's Clamp.

10807	Small Size, each.....	1.75
10808	Large " each.....	3.50



Cat. No. 10810.

### The Buffalo Grip.

10809	Large Size, for Trolley Wire, each.....	5.50
10810	Small " " No. 6 and smaller, each.....	4.50





Cat. No. 10811.

## LINE TOOLS.

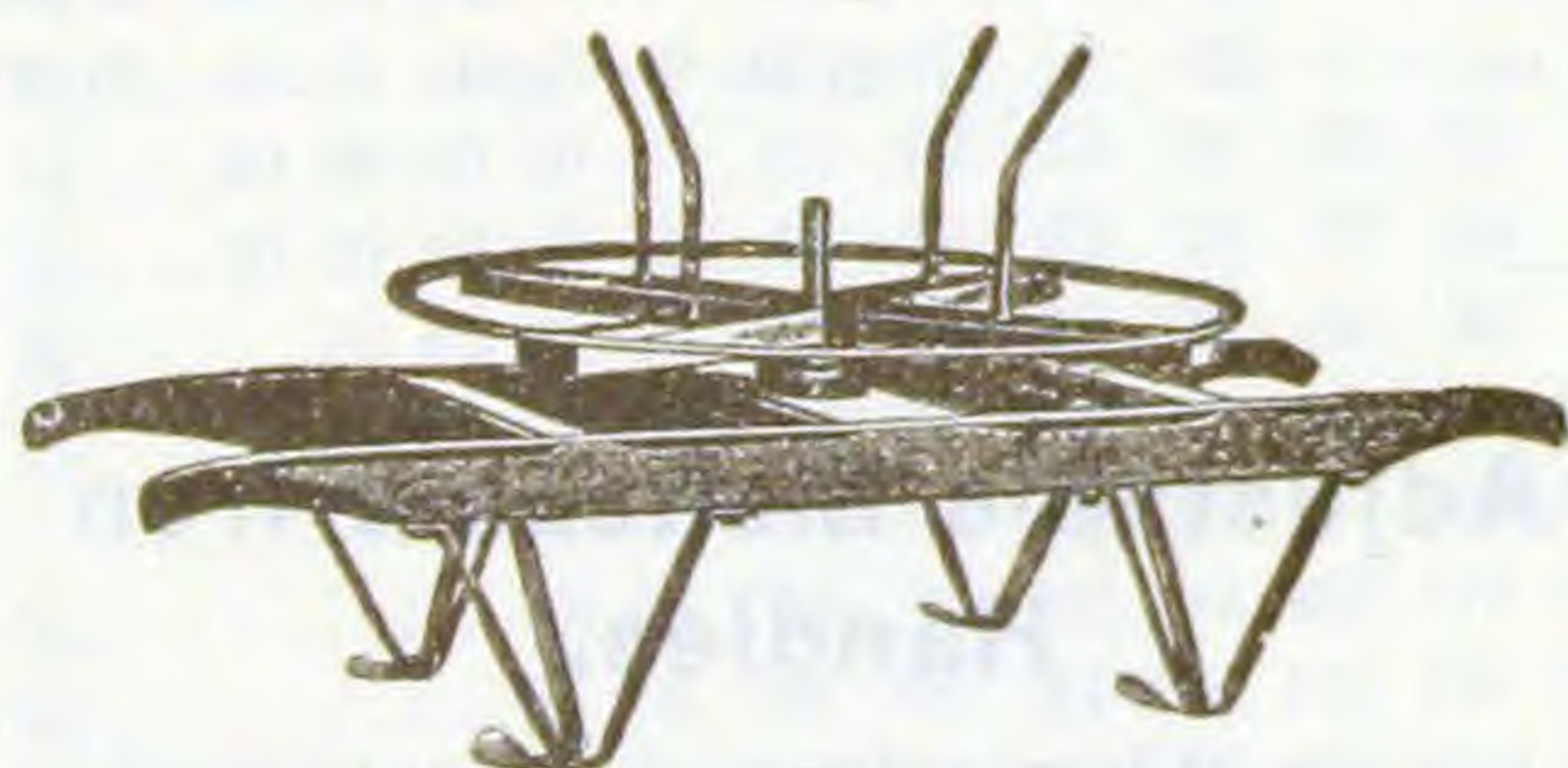
### Reels.

Cat. No.	Price.
10811 Take-Up Reel, each.....	\$15.00



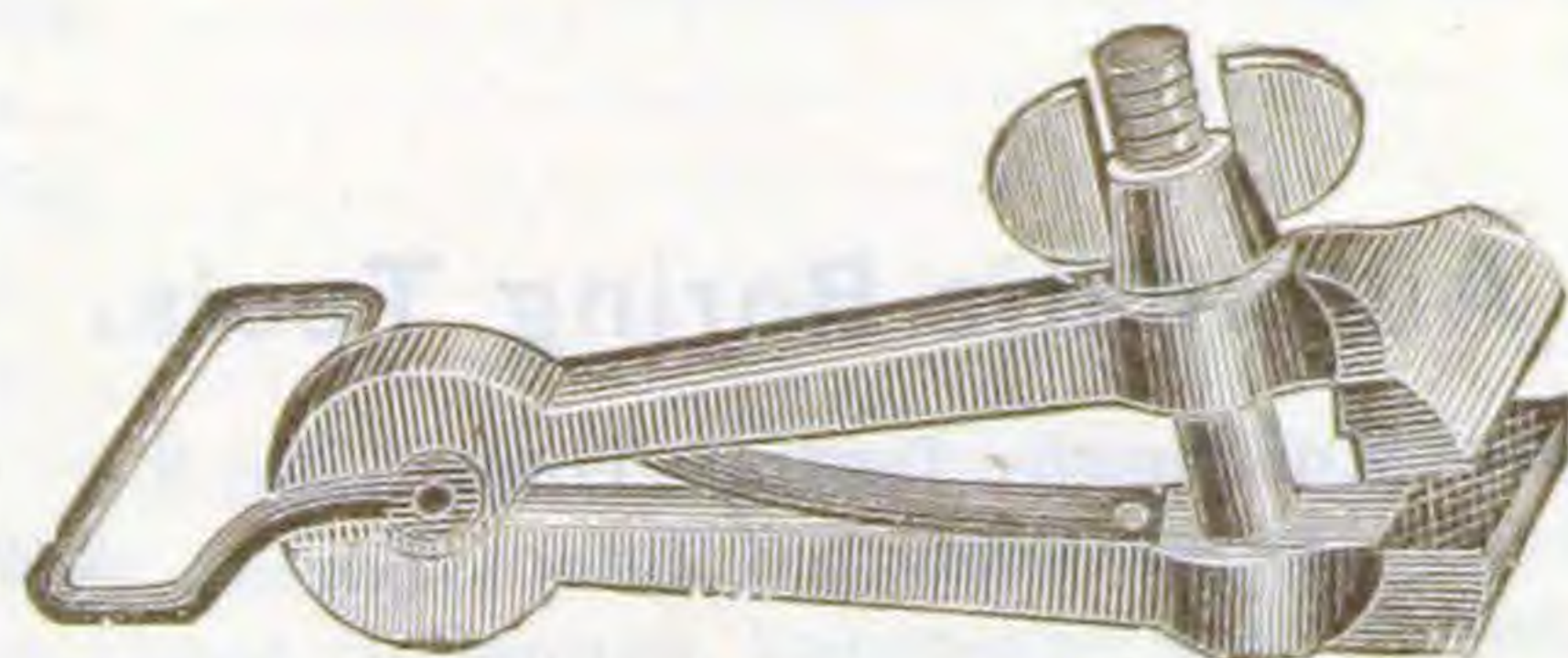
Cat. No. 10812.

10812 Pay-Out Reel each.....	7.50
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Cat. No. 10813.

10813 Pay-Out and Take-Up Reel, each.	16.50
10814 Reel Straps, per set.....	5.00



Cat. No. 10815.

### Vises—Stubs'.

10815 Stubs', 5½ inch, each.....	\$3.75
10816 " 6 " " .....	5.00
10817 " 5½ " Copper Face, each,	4.50
10818 " 6 " " " " " .....	6.00



## LINE AND OFFICE TOOLS.

### The "Syracuse" Electricians' Drill Bit



The Numbers Indicate the Sizes in 32ds of an Inch.

No.	12 Inch, Per Doz.	No.	18 Inch, Per Doz.	No.	24 Inch, Per Doz.	No.	30 Inch, Per Doz.	No.	36 Inch, Per Doz.
6.....	\$5.00	6.....	\$7.00	6.....	\$9.00	6.....	\$11.00	6.....	\$13.00
8.....	5.00	8.....	7.00	8.....	9.00	8.....	11.00	8.....	13.00
10.....	5.50	10.....	7.50	10.....	9.50	10.....	12.00	10.....	13.00
12.....	6.00	12.....	8.00	12.....	10.00	12.....	12.00	12.....	13.00
14.....	7.00	14.....	9.00	14.....	11.00	14.....	13.00	14.....	14.00
16.....	8.00	16.....	10.00	16.....	12.00	16.....	14.00	16.....	15.00
18.....	9.00	18.....	11.00	18.....	13.00	18.....	15.00	18.....	16.00
20.....	10.00	20.....	12.00	20.....	14.00	20.....	15.00	20.....	16.00
22.....	11.00	22.....	13.00	22.....	15.00	22.....	16.00	22.....	17.00
24.....	12.00	24.....	14.00	24.....	16.00	24.....	17.00	24.....	18.00
26.....	13.00	26.....	15.00	26.....	17.00	26.....	18.00	26.....	18.00
28.....	14.00	28.....	16.00	28.....	18.00	28.....	19.00	28.....	19.00
30.....	15.00	30.....	17.00	30.....	19.00	30.....	20.00	30.....	20.00
32.....	16.00	32.....	18.00	32.....	20.00	32.....	20.00	32.....	20.00
34.....	17.00	34.....	19.00	34.....	20.00	34.....	20.00	34.....	20.00
36.....	18.00	36.....	20.00	36.....	21.00	36.....	21.00	36.....	21.00



Cat. No. 10819.

### Adjustable Malleable Iron Handles.

For Use Where a Brace is Inconvenient.

Cat. No.	Price.
10819 Per dozen.....	\$1.25



Cat. No. 10820.

### Automatic Boring Tools.

10820 Automatic Boring Tool, with 8 Drills, each.....	2 50
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## Wood Screws of Every Description.

### BRASS AND BRONZE METAL WOOD SCREWS.

No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24
Inches.																						
1/4	.80	80	84	87	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3/8	.80	82	86	89	95	103	110	120	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1/2	..	86	89	93	103	110	120	130	150	170	190	..	..	..	..	..	..	..	..	..	..	..
5/8	..	..	91	99	106	120	130	150	170	190	215	240	265	..	..	..	..	..	..	..	..	..
3/4	..	..	106	110	115	130	145	160	190	215	240	265	300	335	370	410	450	..	..	..	..	..
7/8	..	..	135	140	145	150	155	180	205	235	265	295	335	370	410	455	505	..	..	..	..	..
1	..	..	155	160	165	170	195	230	260	295	330	365	410	455	500	555	665	..	..	..	..	..
1 1/4	..	..	205	210	215	220	225	265	300	325	385	435	485	535	595	655	720	785	935	..	..	..
1 1/2	..	..	285	290	295	300	305	345	395	445	500	560	625	690	760	835	915	1085	..	..	..	..
1 3/4	..	..	..	..	..	375	380	385	390	445	505	570	635	710	790	865	950	1045	1240	1450	1685	..
2	..	..	..	..	..	480	485	490	495	500	565	640	715	795	880	975	1070	1170	1390	1630	1890	..
2 1/4	..	..	..	..	..	..	685	690	695	700	705	790	880	980	1075	1190	1300	1540	1805	..	..	..
2 1/2	..	..	..	..	..	..	..	950	955	960	965	970	1075	1185	1300	1430	1695	1985	2300	..	..	..
3	..	..	..	..	..	..	..	1370	1375	1380	1385	1390	1395	1400	..	1680	1995	2340	2710	..	..	..

The following varieties of Screws are invoiced from above lists at varying discounts: Flat, Round, Fillister and Oval Head Screws of Brass, Copper, Bronze or Phosphor Bronze, Bronzed or Lacquered.

### IRON WOOD SCREWS.

No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24	26	28
Inches.																								
1/4	40	40	40	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3/8	40	40	40	40	40	41	48	55	62	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1/2	40	40	40	40	41	45	52	59	66	73	80	87	..	..	..	..	..	..	..	..	..	..	..	..
5/8	40	40	40	40	43	49	56	63	70	77	84	91	98	110	..	..	..	..	..	..	..	..	..	..
3/4	40	41	41	46	53	60	67	74	81	88	95	105	120	135	155	..	..	..	..	..	..	..	..	..
7/8	41	44	48	52	59	66	73	80	87	94	100	115	130	150	170	..	..	..	..	..	..	..	..	..
1	51	55	59	66	73	80	87	94	100	110	125	140	160	180	200	220	270	..	..	..	..	..	..	..
1 1/4	62	68	74	80	87	94	100	110	120	135	155	175	195	215	235	285	335	395	..	..	..	..	..	..
1 1/2	70	76	82	88	94	100	110	120	130	150	170	190	210	230	250	300	350	415	..	..	..	..	..	..
1 3/4	..	..	..	92	98	105	110	120	130	145	165	185	205	225	245	270	320	375	435	..	..	..	..	..
2	..	..	..	105	110	120	125	130	140	155	180	200	220	240	260	290	340	400	455	..	..	..	..	..
2 1/4	..	..	..	..	..	130	135	145	150	170	190	210	235	260	280	305	360	420	480	..	..	..	..	..
2 1/2	..	..	..	..	..	155	160	170	175	185	205	225	255	275	300	330	385	450	510	..	..	..	..	..
2 3/4	..	..	..	..	..	..	205	210	215	225	245	270	295	325	360	425	500	560	..	..	..	..	..	..
3	..	..	..	..	..	..	235	240	245	255	265	295	330	365	405	480	555	640	750	..	..	..	..	..
3 1/2	..	..	..	..	..	..	330	340	350	360	370	380	390	430	475	555	635	730	850	..	..	..	..	..
4	..	..	..	..	..	..	450	..	460	..	475	..	560	640	730	840	970	..	..	..	..	..	..	..
4 1/2	..	..	..	..	..	..	..	..	..	..	..	..	640	..	660	740	845	970	1105	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	820	860	975	1105	1260	1425	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1175	1250	1350	1600	1805	..	..	..	..

The following varieties of Iron Screws are invoiced from above list at varying discounts: Flat, Round, Piano, Fillister and Oval Head Screws, Dowel and Felloe Screws, Bright, Blued, Bronzed, Japanned, Lacquered and Tinned.



## LINE AND OFFICE MATERIAL.

### Tape.

In  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{2}$ , 2 and 3 inches.

Cat. No. 10829.

Cat. No.		Price.
10821	Grimshaw, black, per pound.....	\$1.10
10822	" white, " .....	1.00
10823	Competition, black, " .....	.75
10824	" white, " .....	.75
10825	Okonite, black, " .....	2.00
10826	Manson, black, " .....	1.40
10827	" white, " .....	1.40
10828	Paragon, black, " .....	.60
10829	Cardinal, black, " .....	.60
10830	" white, " .....	.60
10831	Kerite Tape per roll .....	.95



Cat. No. 10832 to 10837.

### Soft Rubber Tubing.

	Inside Diam.	Covers Wire.	Approx. No. of Feet per lb.		
10832	$\frac{1}{8}$ inch.	No. 20, B. & S. G., I.E.S.	100,	per lb....	\$1.35
10833	$\frac{3}{16}$ "	" 14, " "	50,	" .....	.85
10834	$\frac{1}{4}$ "	" 10, " "	20,	" .....	.85
10835	$\frac{5}{16}$ "	" 6, " "	15,	" .....	.85
10836	$\frac{3}{8}$ "	" 4, " "	12,	" .....	.85
10837	$\frac{1}{2}$ "	" 0, " "	9,	" .....	.85

### Hard Rubber Tubing.

In lengths of 24 inches.



Cat. No. 10838 to 10845.

	Outside Diam.	Inside Diam.	Approx. No. of Feet, per lb.		
10838	$\frac{3}{8}$ inch.	$\frac{1}{8}$ inch.	20,	per pound.....	\$1.20
10839	$\frac{1}{2}$ "	$\frac{1}{4}$ "	14,	" .....	1.20
10840	$\frac{5}{8}$ "	$\frac{3}{8}$ "	16,	" .....	1.20
10841	$\frac{3}{4}$ "	$\frac{1}{2}$ "	10,	" .....	1.20
10842	$\frac{7}{8}$ "	$\frac{5}{8}$ "	8,	" .....	1.20
10843	1 "	$\frac{3}{4}$ "	8,	" .....	1.20
10844	$1\frac{1}{8}$ "	$\frac{7}{8}$ "	6,	" .....	1.20
10845	$1\frac{1}{4}$ "	1 "	6,	" .....	1.20

### Rubber Gloves.



Cat. No. 10846.

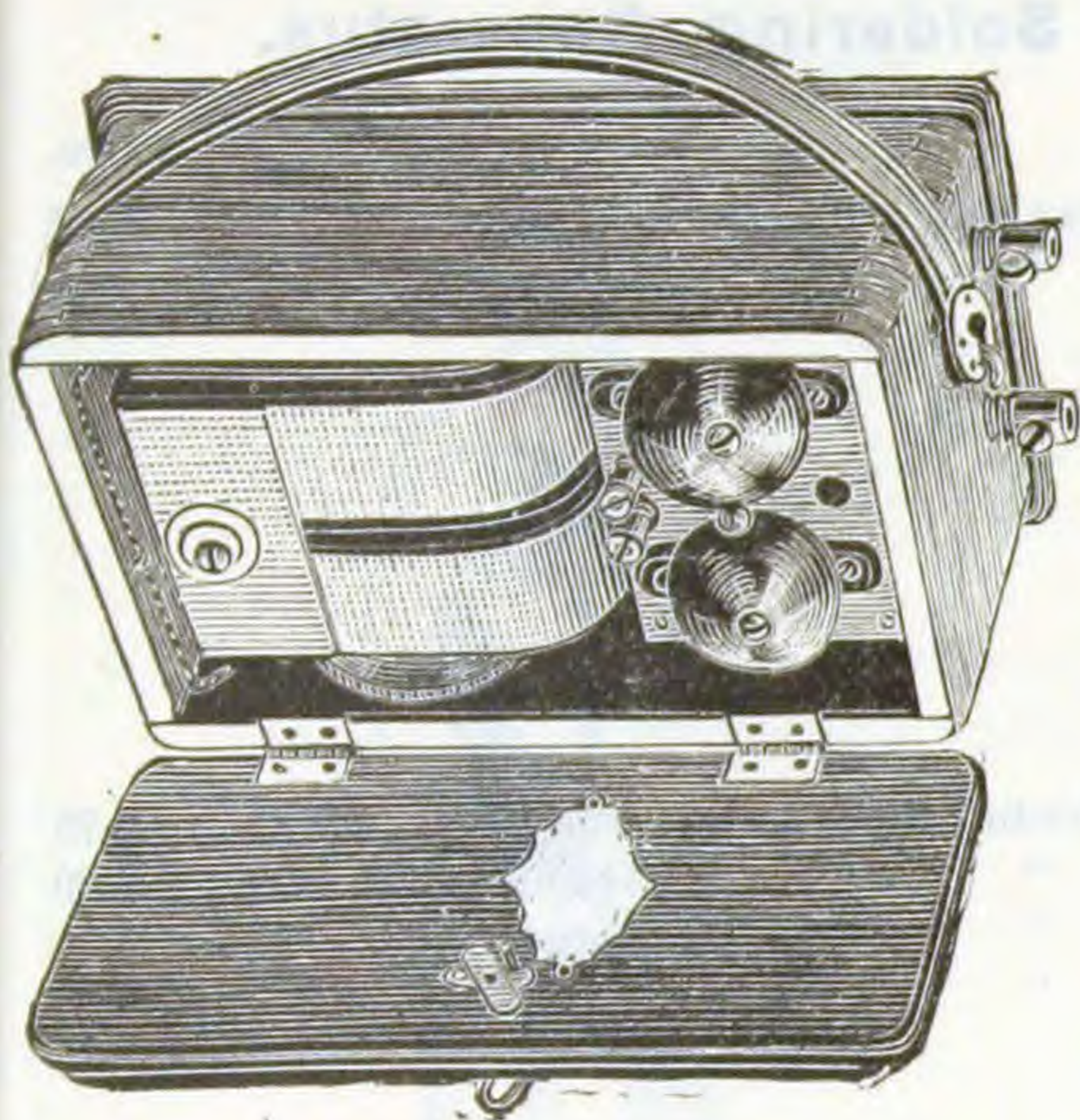
10846	Short, no cuffs, per dozen.....	\$13.50
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Cat. No. 10847.

10847	Long, with cuffs, pure gum, per dozen.....	30.00
10848	$\frac{1}{2}$ long, " regular, " .....	16.50
10849	Long, " " .....	24.00



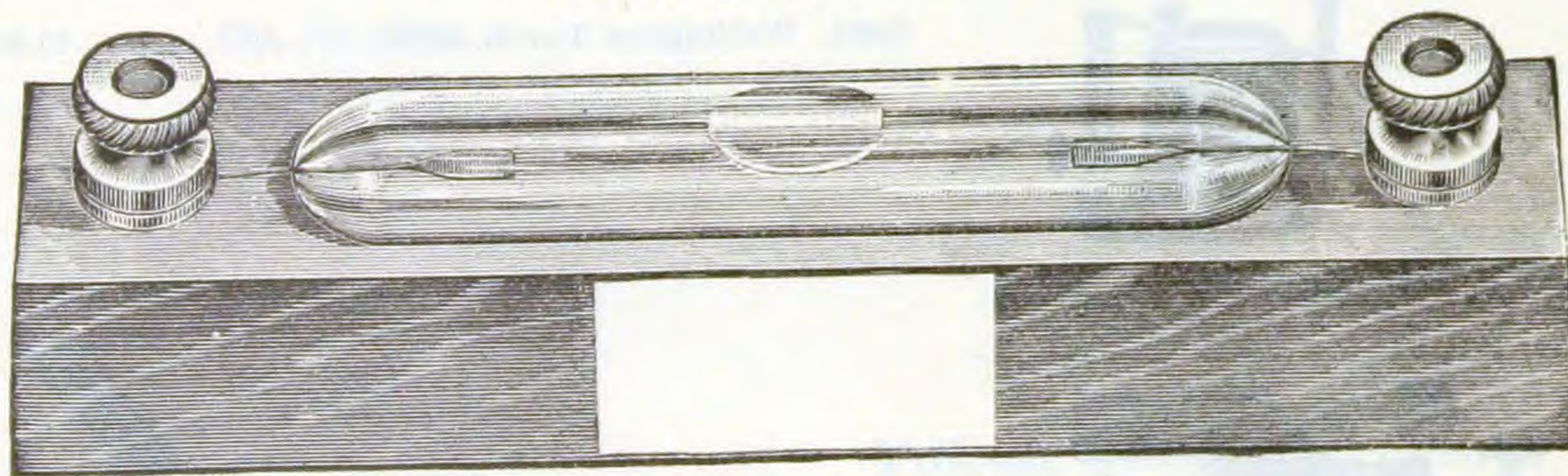


## Magneto Testing Bells.

Portable.—Inside Gongs.

Cat. No.				Price.
10850	Ring through 10,000 Ohms.....			\$9.00
10851	" " 15,000 " .....			10.00
10852	" " 20,000 " .....			12.00
10853	" " 25,000 " .....			13.00
10854	" " 35,000 " .....			15.00
10855	" " 50,000 " .....			30.00

## Polarity Indicator.



Cat. No. 10856. Cut Full Size.

Efficient for currents from half-volt to 600 volts. Cannot be used on alternating current. The indicator when brought into circuit becomes red at Negative pole, and must then be instantly disconnected.

Smallest, Cheapest, Best.

Cat. No.	Price.
10856 Each.....	\$2.50



**Soldering Apparatus.**

Cat. No. 10857.

Cat. No.		Price.
10857	Lineman's Torch, tin, each.....	\$1.85
10858	" " brass, each.....	2.00



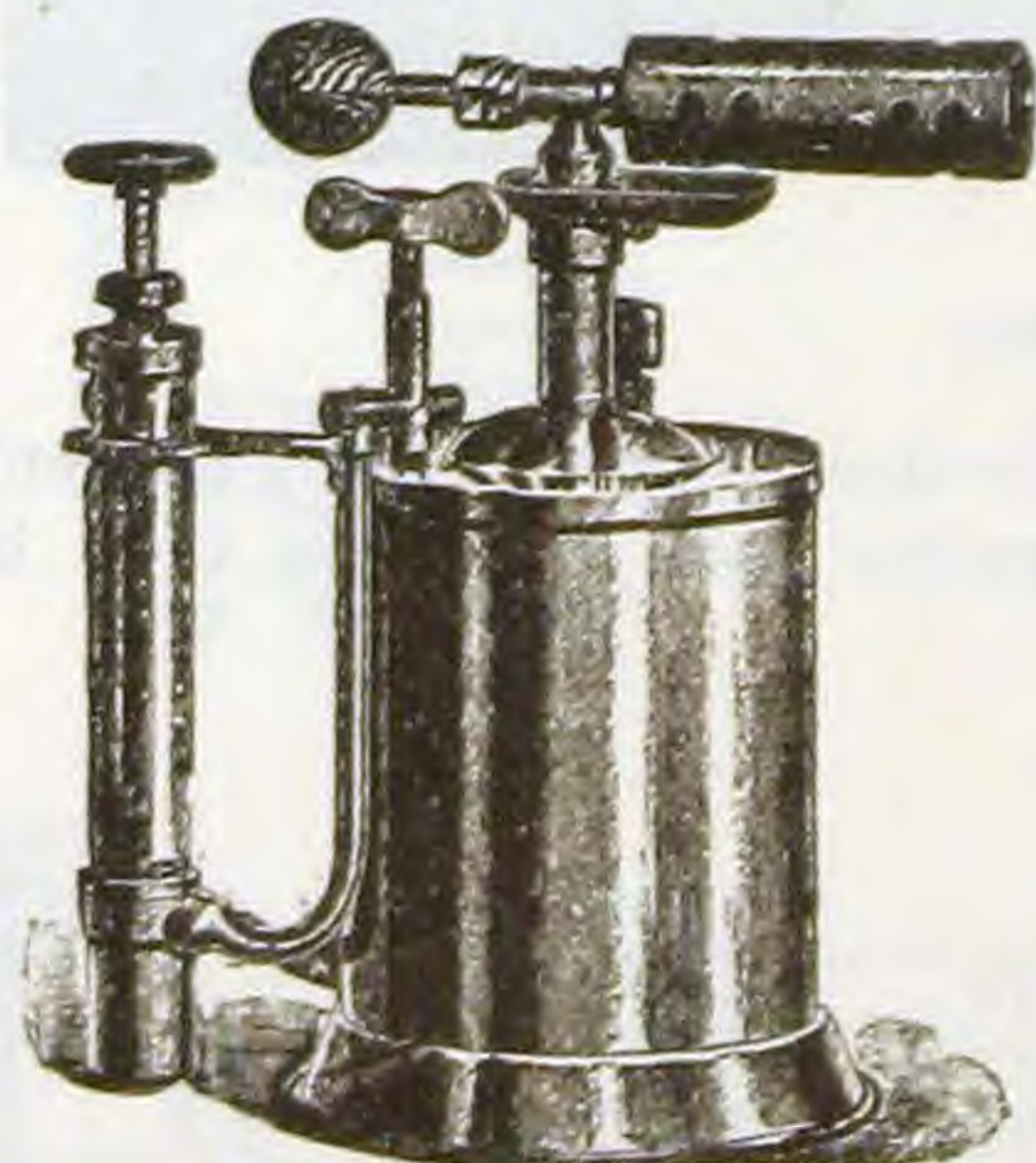
Cat. No. 10859.

10859	Alcohol Blow Lamp, small size, each.....	2.75
10860	" " regular size, each...	3.00
10861	" " large " " ...	3.50
10862	" " extra " " ...	4.50



Cat. No. 10863.

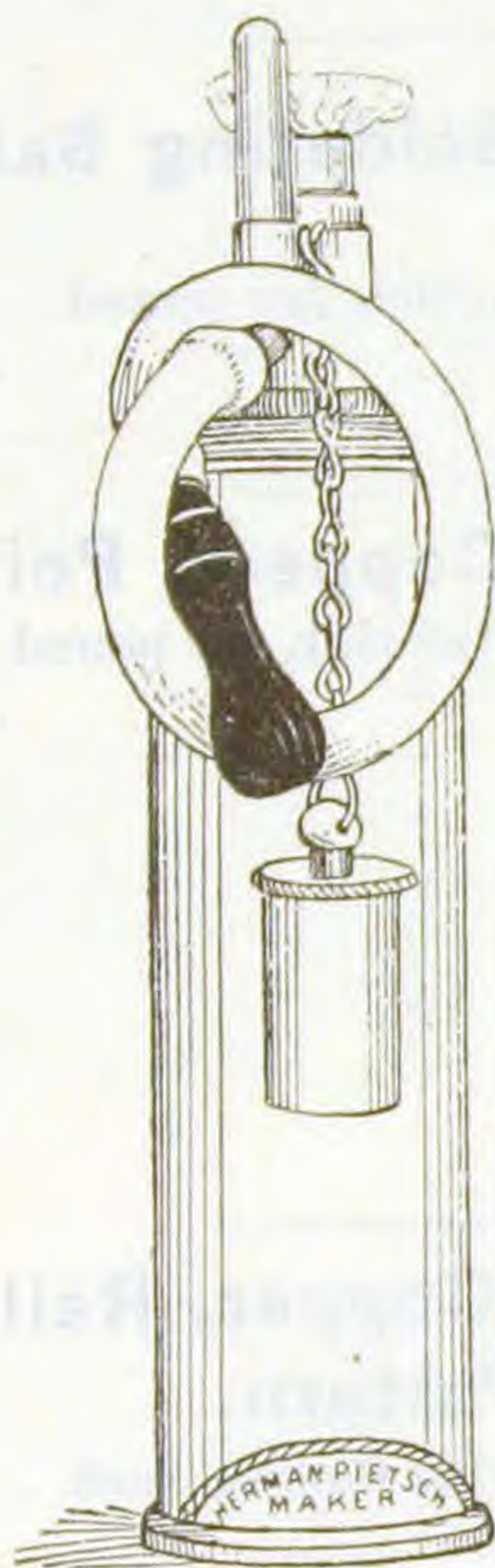
10863	Wellington Torch, each...	10.00
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Cat. No. 10864.

10864	Standard Torch, each.....	9.00
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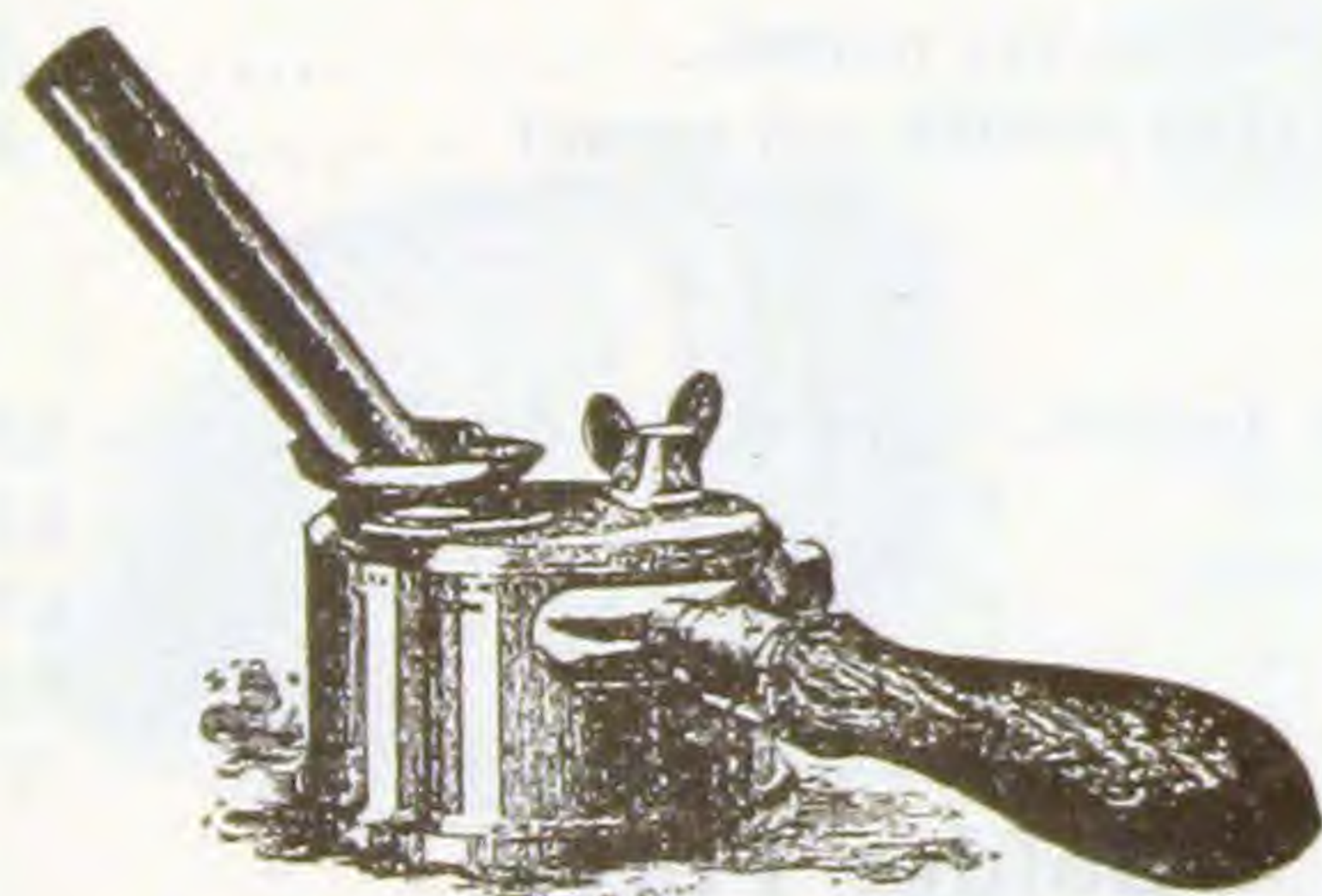


Cat. No. 10865.

## SOLDERING APPARATUS.

### Pietsch Soldering Torch.

Cat. No.	Price.
10865 Pietsch Torch, each. ....	\$3.00



Cat. No. 10866.

### Vulcan Soldering Torch.

10866 Vulcan Torch, each.....	6.00
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## INSULATING MATERIAL.

### Insulating Paints.

Cat. No.		Price.
10883½	P. & B. Paint, 1 gallon cans, per gallon. ....	\$2.50
10884½	" " 5 " " .....	2.20
10885½	" " barrel lots, " .....	2.00
10886½	S. & P. Compound, 1 gallon cans, per gallon...	2.30
10887½	" " 5 " " ...	2.10
10888½	" " barrel lots.....	1.90

### Armalac.

For Insulating Field Magnets and Armatures.

Acid, alkali and waterproof. Absolutely non-inflammable. Unexcelled and unvarying standard of insulation.

Cat. No.	Bbls.	½ Bbls.	Cans.
10889½ Armalac, per gal.....	\$1.65	\$1.75	\$2.00

### Insullac

Is a rapid drying orange colored insulating varnish, possessing great insulating properties and absolute resistance to lubricating oils. Dilute with insullac thinner only.

Cat. No.	Bbls.	½ Bbls.	Cans.
10890½ Insullac, per gal. ....	\$1.65	\$1.75	\$2.00

### Insullac Thinner.

A Dilutant for Insullac.

Cat. No.	Bbls.	½ Bbls.	Cans.
10891½	Insullac Thinner, per gal..\$1.35	\$1.45	\$1.70

### Enamelac.

For producing highly-lustrous, smooth and waterproof surfaces upon wood or iron. Unexcelled as a preservative.

Cat. No.	Bbls.	½ Bbls.	Cans.
10892½ Enamelac, per gal.....	\$0.80	\$0.90	\$1.00



Cat. No. 10893.

### Waste.

Cat. No.	Waste.	Price.
10893	Best Quality Cotton Waste, per pound.....	\$0.15

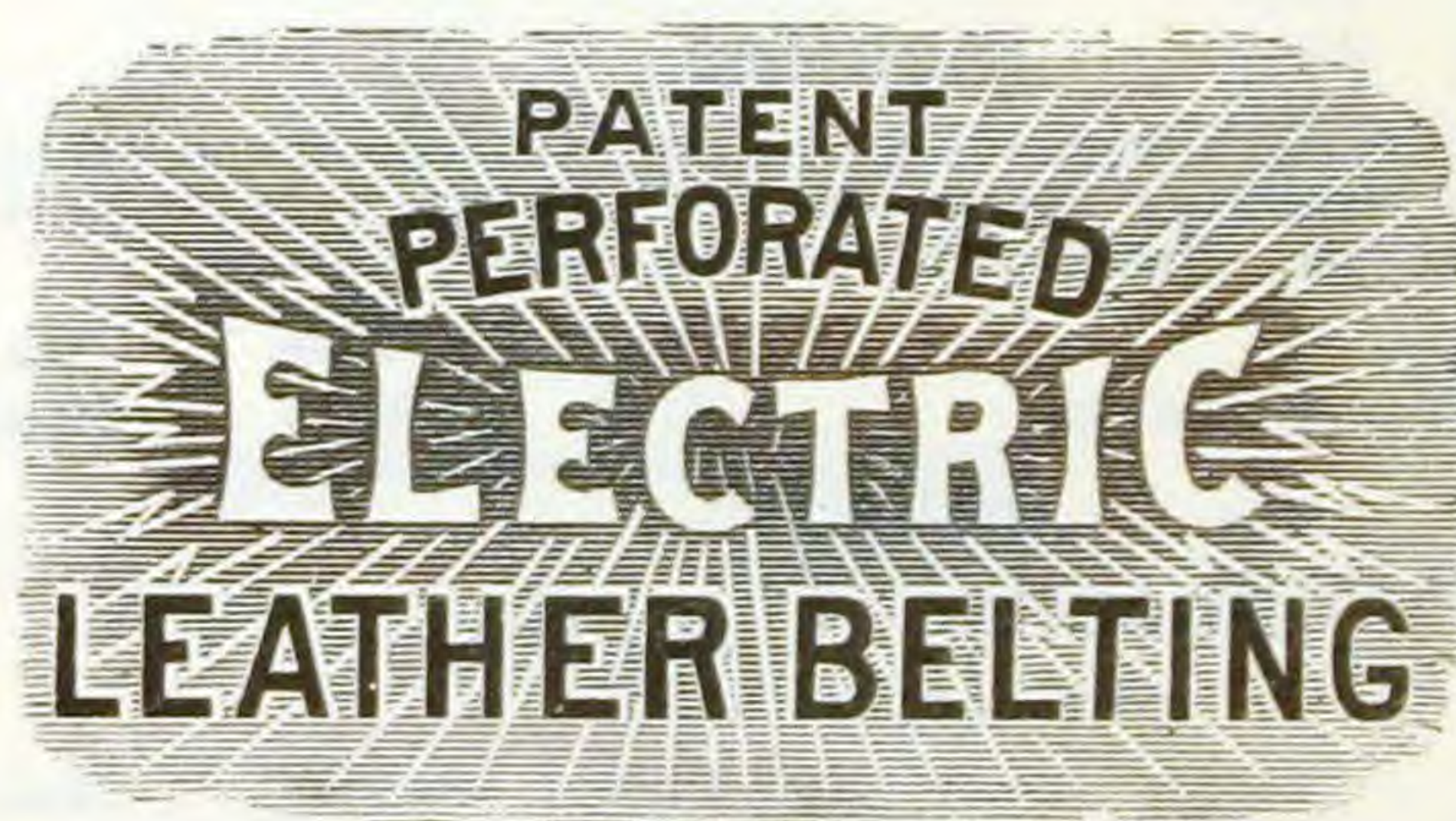
### Crocus Cloth.

10894	Per Sheet.....	.05
10895	" Ream.....	18.00

### Asbestos.

10896	Asbestos Paper, in rolls, per pound.....	.30
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## Double Ply Belting.

Per Running Foot, Net.

Cat. No.			Price.
10897	1	inch, per foot .....	\$0.14
10898	1½	" " .....	.22
10899	2	" " .....	.31
10900	2½	" " .....	.40
10901	3	" " .....	.48
10902	3½	" " .....	.57
10903	4	" " .....	.66
10904	4½	" " .....	.75
10905	5	" " .....	.84
10906	6	" " .....	1.02
10907	7	" " .....	1.19
10908	8	" " .....	1.36
10909	9	" " .....	1.54
10910	10	" " .....	1.72
10911	11	" " .....	1.89
10912	12	" " .....	2.07
10913	13	" " .....	2.24
10914	14	" " .....	2.42
10915	15	" " .....	2.64
10916	16	" " .....	2.86
10917	18	" " .....	3.30
10918	20	" " .....	3.75
10919	22	" " .....	4.20
10920	23	" " .....	4.40
10921	24	" " .....	4.60
10922	26	" " .....	5.10
10923	28	" " .....	5.50
10924	30	" " .....	6.10
10925	32	" " .....	6.60
10926	34	" " .....	7.15
10927	36	" " .....	7.70
10928	40	" " .....	8.60
10929	44	" " .....	9.50
10930	48	" " .....	10.40
10931	52	" " .....	11.20
10932	56	" " .....	12.10
10933	60	" " .....	13.00
10934	64	" " .....	13.90
10935	68	" " .....	14.80
10936	72	" " .....	15.80





Cat. No. 10938.



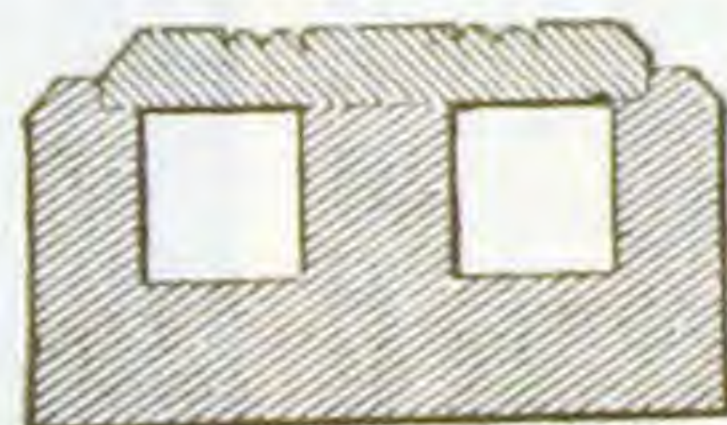
Cat. No. 10940.



Cat. No. 10942.



Cat. No. 10943.



Cat. No. 10944.



Cat. No. 10959.

## Ornamental Moulding.

Made in Two and Three-Wire, with  $\frac{1}{4}$  inch Groove.

Cat. No.	Price.
10937 Polished Oak, 2-wire, per foot.....	\$0.25
10938       "      3       "      ".....	.30

10939	Polished Oak, 2-wire, per foot.....	.25
10940	"    3    "    "    .....	.30

10941	White and Gold, 2-wire, per foot .....	.30
10942	"          "      3      "          " .....	.40

### Plain Mouldings.

Cat. No.	Description.	Outside Diam. of Wire, Inches.	Width of Bottom, Inches.	Price per 1,000 Ft.
10943	A-1 complete, 2-wire,	$\frac{7}{32}$	$1\frac{3}{16}$	\$11.00
10944	A-2 complete, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	21.00
10945	A-2 bottom, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	13.50
10946	A-2 capping, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	7.50
10947	B-1 complete, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	25.00
10948	B-1 bottom, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	16.00
10949	B-1 capping, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	9.00
10950	C-1 complete, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	28.00
10951	C-1 bottom, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	19.00
10952	C-1 capping, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	9.00
10953	D-1 complete, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	40.00
10954	D-1 bottom, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	29.00
10955	D-1 capping, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	11.00
10956	E-1 complete, 2 "	$\frac{23}{32}$	$3\frac{1}{16}$	60.00
10957	E-1 bottom, 2 "	$\frac{23}{32}$	$3\frac{1}{16}$	48.00
10958	E-1 capping, 2 "	$\frac{23}{32}$	$3\frac{1}{16}$	12.00
10959	A-3 complete, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	18.00
10960	A-3 bottom, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	10.50
10961	A-3 capping, 2 "	$\frac{7}{32}$	$1\frac{9}{16}$	7.50
10962	B-2 complete, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	21.00
10963	B-2 bottom, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	12.00
10964	B-2 capping, 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	9.00
10965	C-2 complete, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	25.00
10966	C-2 bottom, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	16.00
10967	C-2 capping, 2 "	$\frac{13}{32}$	$2\frac{1}{16}$	9.00
10968	D-2 complete, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	38.00
10969	D-2 bottom, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	27.00
10970	D-2 capping, 2 "	$\frac{9}{16}$	$2\frac{3}{8}$	11.00



## Mouldings.—Continued.



Cat. No. 10971.



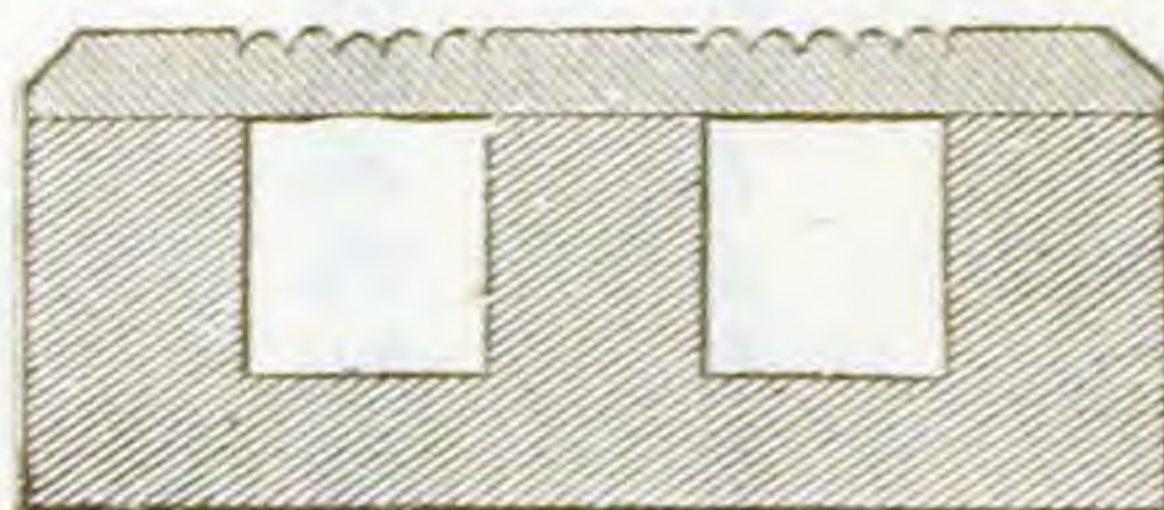
Cat. No. 10974.



Cat. No. 10978.



Cat. No. 10992.



Cat. No. 11004.



Cat. No. 11013.

Cat. No.	Description.	Outside Diam. of Wire, Inches.	Width of Bottom, Inches.	Price, per 1,000 Feet.
10971	A-6, complete, 2-wire,	$\frac{7}{32}$	$1\frac{3}{16}$	\$15.00
10972	B-5, " 2 "	$\frac{5}{16}$	$1\frac{3}{4}$	17.50
10973	C-5, " 2 "	$\frac{3}{8}$	$2\frac{1}{16}$	22.50
10974	A-7, " 3 "	$\frac{7}{32}$	$2\frac{3}{32}$	22.00
10975	B-6, " 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	25.00
10976	C-6, " 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	30.00
10977	A-4, " 3 "	$\frac{7}{32}$	$2\frac{3}{32}$	30.00
10978	A-4, bottom, 3 "	$\frac{7}{32}$	$2\frac{3}{32}$	19.00
10979	A-4, capping, 3 "	$\frac{7}{32}$	$2\frac{3}{32}$	11.00
10980	B-3, complete, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	35.00
10981	B-3, bottom, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	21.50
10982	B-3, capping, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	13.50
10983	C-3, complete, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	42.00
10984	C-3, bottom, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	27.00
10985	C-3, capping, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	15.00
10986	D-3, complete, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	60.00
10987	D-3, bottom, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	38.00
10988	D-3, capping, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	22.00
10989	E-2, complete, 3 "	$\frac{3}{8}$	$4\frac{1}{32}$	80.00
10990	E-2, bottom, 3 "	$\frac{3}{8}$	$4\frac{1}{32}$	59.00
10991	E-2, capping, 3 "	$\frac{3}{8}$	$4\frac{1}{32}$	21.00
10992	A-5, complete, 3 "	$\frac{7}{32}$	$2\frac{9}{32}$	27.00
10993	A-5, bottom, 3 "	$\frac{7}{32}$	$2\frac{9}{32}$	16.00
10994	A-5, capping, 3 "	$\frac{7}{32}$	$2\frac{9}{32}$	11.00
10995	B-4, complete, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	30.00
10996	B-4, bottom, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	16.50
10997	B-4, capping, 3 "	$\frac{5}{16}$	$2\frac{9}{16}$	13.50
10998	C-4, complete, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	38.00
10999	C-4, bottom, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	23.00
11000	C-4, capping, 3 "	$\frac{3}{8}$	$2\frac{3}{16}$	15.00
11001	D-4, complete, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	58.00
11002	D-4, bottom, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	36.00
11003	D-4, capping, 3 "	$\frac{3}{8}$	$3\frac{1}{16}$	22.00
11004	F-1, complete, 2 "	$\frac{7}{8}$	4	80.00
11005	F-1, bottom, 2 "	$\frac{7}{8}$	4	56.00
11006	F-1, capping, 2 "	$\frac{7}{8}$	4	24.00
11007	G-1, complete, 2 "	1	5	110.00
11008	G-1, bottom, 2 "	1	5	80.00
11009	G-1, capping, 2 "	1	5	30.00
11010	H-1, complete, 2 "	$1\frac{3}{16}$	$5\frac{3}{8}$	121.00
11011	H-1, bottom, 2 "	$1\frac{3}{16}$	$5\frac{3}{8}$	90.00
11012	H-1, capping, 2 "	$1\frac{3}{16}$	$5\frac{3}{8}$	31.00
11013	F-2, complete, 3 "	$\frac{7}{8}$	$5\frac{5}{8}$	100.00
11014	F-2, bottom, 3 "	$\frac{7}{8}$	$5\frac{5}{8}$	68.00
11015	F-2, capping, 3 "	$\frac{7}{8}$	$5\frac{5}{8}$	32.00
11016	G-2, complete, 3 "	1	7	140.00
11017	G-2, bottom, 3 "	1	7	100.00
11018	G-2, capping, 3 "	1	7	40.00



## NEW IRON ARMORED INSULATING CONDUIT.

Cat. No.							Price.
11019	$\frac{7}{8}$ in.	inside diam.,	.675 in.	outside diam.,	per hundred feet	....	\$9.25
11020	$\frac{5}{8}$	"	.84	"	"	....	11.50
11021	$\frac{3}{4}$	"	1.05	"	"	....	15.00
11022	1	"	1.315	"	"	....	21.00
11023	$1\frac{1}{4}$	"	1.66	"	"	....	27.00
11024	$1\frac{1}{2}$	"	1.90	"	"	....	34.00
11025	2	"	2.375	"	"	....	47.00
11026	$2\frac{1}{2}$	"	2.875	"	"	....	67.00

All sizes supplied in ten-foot lengths, with a coupling for each length.

Tubes have slightly tapering threads at both ends, and in making joints, these ends should be firmly abutted in center of coupling to secure continuity of insulation. Wherever the tube is cut the burr should be removed by using a Butt Reamer.

Prices on all New Iron Armored Conduit and fittings are subject to change, without notice, on account of the fluctuation in prices of iron piping. Contractors are advised to obtain from us latest quotations before placing their orders.

The New Iron Armored Insulating Conduit consists of our well-known insulation still further improved within a wrought iron pipe, the thickness of the armor being about 1-16 inch. The outside diameters of commercial wrought iron gas pipe are maintained in the new system; a reduction in the thickness of the wall giving greater inside diameter. It is impossible to draw or force the insulating lining out of the pipe as it is placed there under high pressure, filling up the interstices, and leaving absolutely no air space between the insulation and iron.

The New Iron Armored Insulating Conduit possesses all the qualities of gas or water pipe, and can be installed with equal ease by the use of tools for cutting, threading, etc.

In combination with the Brass Armored Conduit it can be advantageously employed in construction work, under concrete, tiled or mosaic floors, and other like places, without the expensive precautions for protection that are necessary in the use of plain or Brass Armored Conduit.

A saving in labor is effected in installing the New Iron Armored Conduit, inasmuch as it can be installed in advance of the mason work, at the most advantageous time during the construction of a building, without fear of accident to it by masons, mechanics, or other workmen.



Cat. No. 11019.



## NEW IRON ARMORED INSULATING CONDUIT.—ELBOWS.

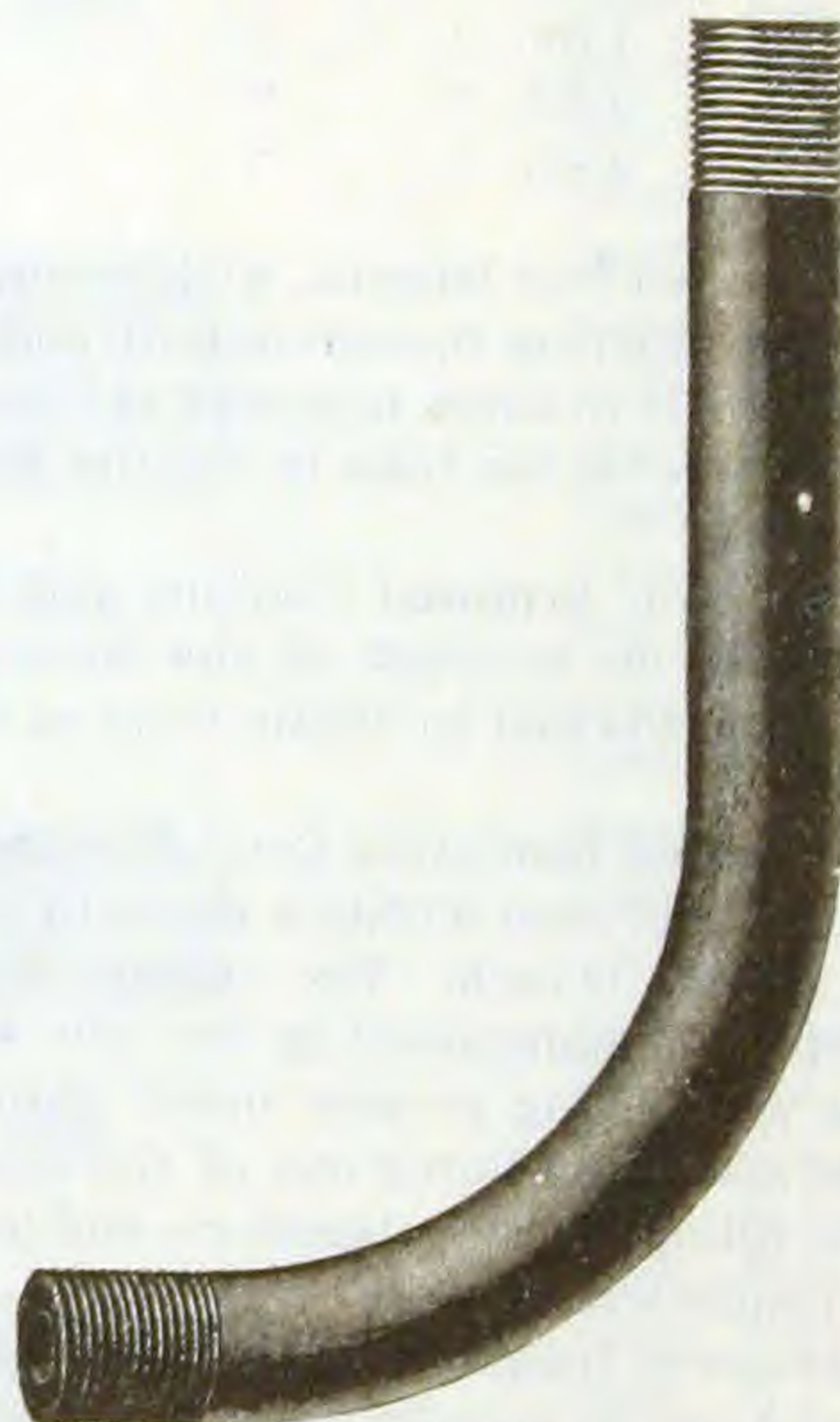
Short  
Insulating  
Elbows.

Cat. No. 11027.

Cat. No.	Inside Diam.	Price per 100.
11027	$\frac{7}{16}$ inch	\$16.00
11028	$\frac{5}{8}$ "	18.00
11029	$\frac{3}{4}$ "	23.00
11030	1 "	30.00
11031	$1\frac{1}{4}$ "	35.00
11032	$1\frac{1}{2}$ "	60.00
11033	2 "	165.00
11034	$2\frac{1}{2}$ "	240.00



Cat. No. 11035.



Cat. No. 11038.

Insulating Outlet  
Elbows.

Cat. No.	Price.
11035	$\frac{7}{16}$ inch per hundred..\$21.00
11036	$\frac{5}{8}$ " " " " .. 24.00
11037	$\frac{3}{4}$ " " " " .. 28.00

	Per 100.
11038	$\frac{7}{16}$ in. inside diam.....\$18.00
11039	$\frac{5}{8}$ " " " " ..... 20.00
11040	$\frac{3}{4}$ " " " " ..... 24.00



Cat. No. 11041.



Cat. No. 11041.

Insulating Elbow  
Outlets.

	Per 100.
11041	$\frac{7}{16}$ in. inside diam. ....\$25.00
11042	$\frac{5}{8}$ " " " " ..... 30.00
11043	$\frac{3}{4}$ " " " " ..... 38.00
11044	1 " " " " ..... 50.00
11045	$1\frac{1}{4}$ " " " " ..... 70.00
11046	$1\frac{1}{2}$ " " " " ..... 85.00
11047	2 " " " " .....110.00
11048	$2\frac{1}{2}$ " " " " .....150.00

Sizes given are of conduit for which Elbows are fitted.



## NEW IRON ARMORED INSULATING CONDUIT. ELBOWS.

### List of S Insulating Elbows.

Cat. No.	Size Inside Diam.	Offset Inches.	Price per 100.	Offset Inches.	Price per 100.	Offset Inches.	Price per 100.
11049	$\frac{7}{8}$	14	\$33.00	16	\$34.50	18	\$35.00
11050	$\frac{5}{8}$	17	41.00	19	42.70	21	44.40
11051	$\frac{3}{4}$	19	62.00	21	64.00	23	66.00
11052	1	23	76.00	25	79.00	27	82.00
11053	$1\frac{1}{4}$	28	96.00	30	100.00	32	104.00

NOTE—The No. 11049 (Short) S Elbow with 14-inch offset is kept in stock regularly.

The No. 11049 (Long) S Elbow having a greater offset than 14 inches will be made to order at the above list prices.

If No. 11049 S Elbows are required longer than those listed, they can be formed by combining a Nipple of the desired length, two Couplings, and two No. 11027 Elbows.



Cat. No. 11049 S  
Short.



Cat. No. 11049 S  
Long.



Cat. No. 11049 S  
Insulating S  
Elbows,  
Extra Long.





Cat. No. 11054  
Long.

Cat. No. 11054  
Short.

## NEW IRON ARMORED INSULATING CONDUIT. ELBOWS.

### List of Corner Insulating Elbows.

Cat. No.	Size	Offset Inches.	Price per 100.	Offset Inches.	Price per 100.	Offset Inches.	Price per 100.
	Inside Diam.						
11054	$\frac{7}{8}$	14	\$33.00	16	\$34.50	18	\$35.00
11055	$\frac{5}{8}$	17	41.00	19	42.70	21	44.40
11056	$\frac{3}{4}$	19	62.00	21	64.00	23	66.00
11057	1	23	76.00	25	79.00	27	82.00
11058	$1\frac{1}{4}$	28	96.00	30	100.00	32	104.00

NOTE.—The No. 11054 (Short) Corner Elbow with 14 inch offset is kept in stock regularly.

The No. 11054 (Long) Corner Elbow having a greater offset than 14 inches will be made to order at above list prices.

In ordering, it should be stated whether Right or Left Elbows are required.

If No. 11054 Elbows are required longer than those listed, they can be formed by combining a Nipple of the desired length, two Couplings and two No. 11027 Elbows.

### Long Insulating Elbows.

Cat. No.	Inside Diameter.....	$\frac{7}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	Offset.
11059	Length, 12 in., per 100....	\$22.50	\$25.50	\$32.80	\$43.50	\$52.00	$\frac{5}{8}$ in. Elbow, 7 in.
11060	" 14 "	24.00	27.50	35.30	47.00	56.50	$\frac{3}{4}$ " " 8 $\frac{1}{2}$ "
11061	" 16 "	25.50	29.50	37.80	50.50	61.00	1 " " 10 $\frac{1}{2}$ "
11062	" 18 "	27.00	31.50	40.30	54.00	65.50	$1\frac{1}{4}$ " " 12 "

NOTE.—Other lengths made to order. No. 11059 New Iron Armored Insulating Elbow corresponds in style with No. 11121 Brass Armored Elbow.



## NEW IRON ARMORED INSULATING CONDUIT.—FITTINGS.



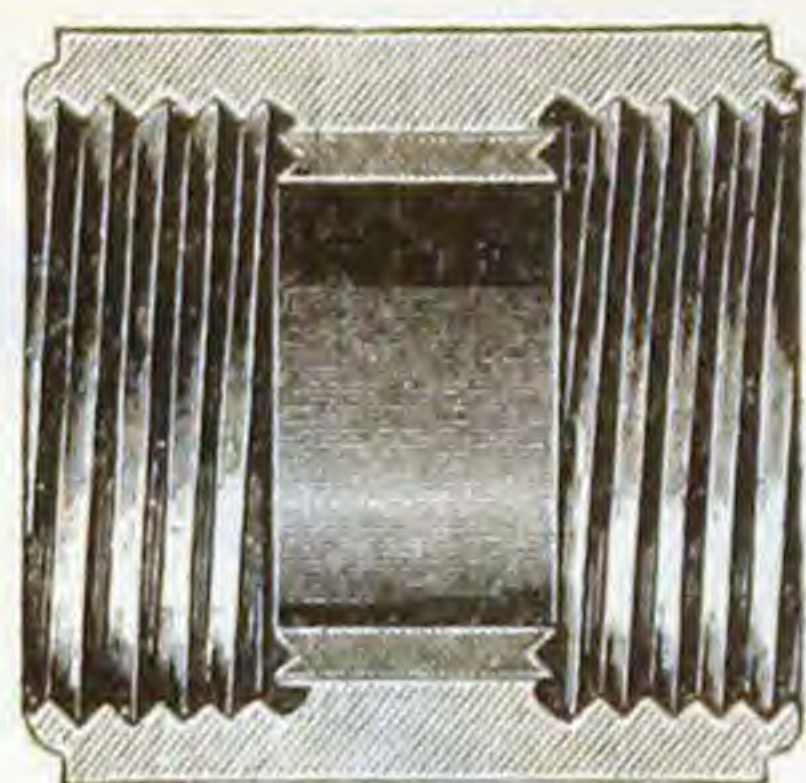
Cat. No. 11063.

## Insulating Nipples.

Cat. No.	Inside Diam. Inch.	LENGTH IN INCHES.						PRICE, EACH.		PRICE EACH, OF EXTRA LONG.							
		Close		Short		Long		Close or Short	Long	5 inch	6 inch	7 inch	8 inch	9 inch	10 inch	11 inch	12 inch
11063	$\frac{7}{8}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	\$0.06	\$0.09	\$0.17	\$0.18	\$0.19	\$0.20	\$0.21	\$0.22	\$0.23	\$0.25
11064	$\frac{5}{8}$	$1\frac{1}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	.07	.10	.18	.19	.20	.21	.22	.23	.25	.27
11065	$\frac{3}{4}$	$1\frac{3}{8}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	.09	.11	.20	.21	.22	.23	.25	.27	.29	.31
11066	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	.10	.15	.22	.24	.27	.29	.31	.33	.36	.40
11067	$1\frac{1}{4}$	$1\frac{5}{8}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	.14	.20	.29	.31	.33	.35	.38	.40	.43	.46
11068	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	.17	.25	.36	.38	.40	.42	.45	.48	.51	.55
11069	2	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	.25	.35	.44	.49	.54	.59	.64	.69	.74	.79
11070	$2\frac{1}{2}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	.56	.75	.75	.80	.85	.91	1.00	1.10	1.20	1.30



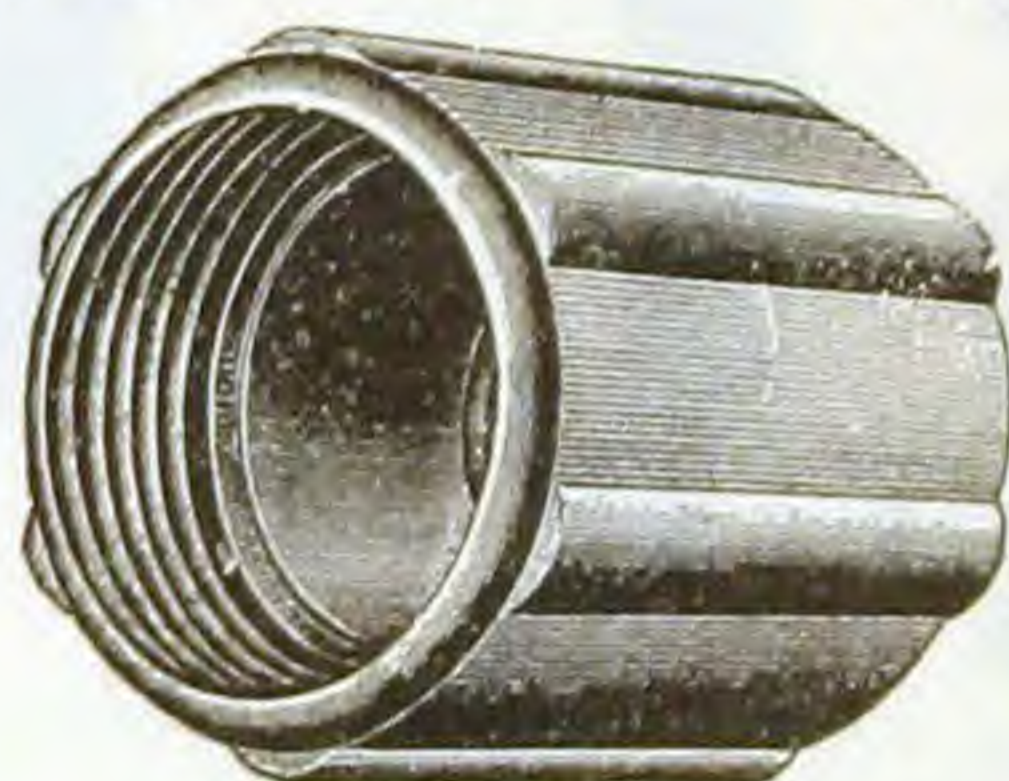
**NEW IRON ARMORED INSULATING CONDUIT.—FITTINGS.**



Cat. No. 11071. Inside View.



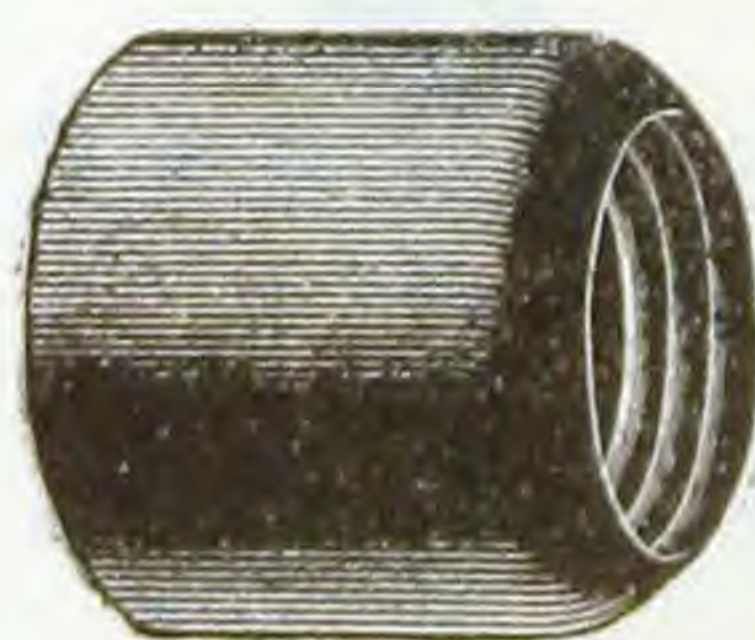
Cat. No. 11071.  
End View.



Cat. No. 11071.



Cat. No. 11075.



Cat. No. 11083.



Cat. No. 11093.



Cat. No. 11091.



Cat. No. 11104.

### Insulating Coupling

For New Iron Armored Insul. Conduit.

Cat. No.	Size.			Price per 100.
11071	$\frac{7}{8}$	inch inside diameter.....		\$6.00
11072	$\frac{5}{8}$	" " " " " " " " " " " "		7.00
11073	$\frac{3}{4}$	" " " " " " " " " " " "		10.00
11074	1	" " " " " " " " " " " "		13.00

As will be evident upon inspection this new coupling provides for continuous insulation in this new iron armored conduit system.

## Couplings

For New Iron Armored Insul. Conduit.

Cat. No.	Size.				Price per 100.	Right and Left C'pl'g.
11075	$\frac{7}{8}$ inch	inside	diam.,		\$6.00	\$8.00
11076	$\frac{5}{8}$	"	"	"	7.00	11 00
11077	$\frac{3}{4}$	"	"	"	10.00	15.00
11078	1	"	"	"	13.00	20.00
11079	$1\frac{1}{4}$	"	"	"	17.00	25.00
11080	$1\frac{1}{2}$	"	"	"	21.00	30.00
11081	2	"	"	"	28.00	50.00
11082	$2\frac{1}{2}$	"	"	"	40.00	85.00

## Caps

For New Iron Armored Insul. Conduit.

Cat. No.	Size.	Price per 100.
11083	$\frac{7}{8}$ in. inside diam., put up,	\$3.00
11084	$\frac{5}{8}$ " " " "	5.00
11085	$\frac{3}{4}$ " " " "	8.00
11086	1 " " " "	11.00
11087	$1\frac{1}{4}$ " " " "	15.00
11088	$1\frac{1}{2}$ " " " "	22.00
11089	2 " " " "	30.00
11090	$2\frac{1}{2}$ " " " "	50.00

### Plugs—Cast Iron.

Cat. No.	Size of Conduit.	Price.
11091	$\frac{7}{8}$ inch, each	\$0.03
11092	$\frac{5}{8}$ " " " " " " " " " "	.04
11093	$\frac{3}{4}$ " " " " " " " " " "	.05
11094	1 " " " " " " " " " "	.06
11095	$1\frac{1}{4}$ " " " " " " " " " "	.10
11096	$1\frac{1}{2}$ " " " " " " " " " "	.13
11097	2 " " " " " " " " " "	.20
11097 $\frac{1}{2}$	$2\frac{1}{2}$ " " " " " " " " " "	.35

### Wrought-Iron Pipe Hooks.

For Securing Conduit.

Cat. No.	Size.	Price per 100.
11098	$\frac{7}{8}$ inch.	\$0.40
11099	$\frac{5}{8}$ "	.50
11100	$\frac{3}{4}$ "	.60
11101	1 "	.70
11102	$1\frac{1}{4}$ "	1.00
11103	$1\frac{1}{2}$ "	1 20

### Straps.

11104	Malleable Iron, plain or tinned, per pound.....	\$0.20
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**BRASS ARMORED CONDUIT.—ELBOWS.**

Cat. No. 11113.

**Brass Armored Elbow.**

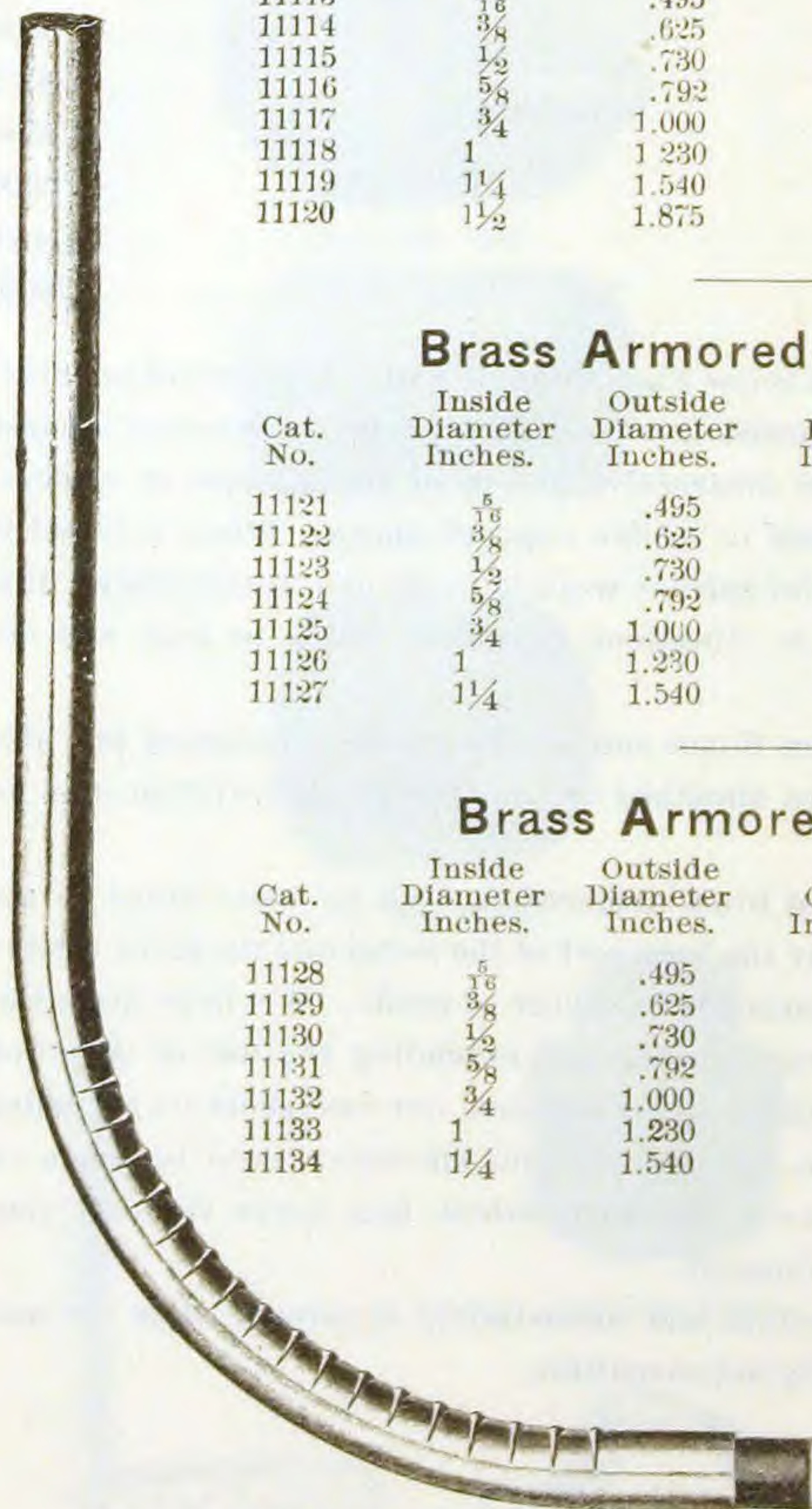
Cat. No.	Inside Diameter Inches.	Outside Diameter Inches.	Radius Inches.	Length over all Inches.	Price per 100 pcs.
11113	$\frac{5}{16}$	.495	$3\frac{1}{2}$	$4\frac{3}{4}$	\$6.00
11114	$\frac{3}{8}$	.625	4	$5\frac{1}{2}$	7.20
11115	$\frac{1}{2}$	.730	$4\frac{1}{2}$	6	9.00
11116	$\frac{5}{8}$	.792	$4\frac{1}{2}$	$6\frac{1}{4}$	10.60
11117	$\frac{3}{4}$	1.000	6	$7\frac{1}{2}$	14.10
11118	1	1.230	9	$11\frac{1}{2}$	23.50
11119	$1\frac{1}{4}$	1.540	10	$13\frac{3}{4}$	35.00
11120	$1\frac{1}{2}$	1.875	12	$15\frac{1}{4}$	57.10

**Brass Armored Long Elbow.**

Cat. No.	Inside Diameter Inches.	Outside Diameter Inches.	Radius Inches.	Length over all Inches.	Price per 100 pcs.
11121	$\frac{5}{16}$	.495	$3\frac{1}{4}$	$17\frac{3}{4}$	\$16.00
11122	$\frac{3}{8}$	.625	4	$17\frac{3}{4}$	17.75
11123	$\frac{1}{2}$	.730	$4\frac{1}{2}$	18	18.75
11124	$\frac{5}{8}$	.792	$4\frac{1}{2}$	18	20.25
11125	$\frac{3}{4}$	1.000	6	19	26.25
11126	1	1.230	$8\frac{1}{2}$	23	41.00
11127	$1\frac{1}{4}$	1.540	$9\frac{1}{2}$	26	55.00

**Brass Armored S Elbow.**

Cat. No.	Inside Diameter Inches.	Outside Diameter Inches.	Offset Inches.	Length over all Inches.	Price per 100 pcs.
11128	$\frac{5}{16}$	.495	4	9	\$15.75
11129	$\frac{3}{8}$	.625	4	$10\frac{1}{2}$	17.25
11130	$\frac{1}{2}$	.730	4	11	20.00
11131	$\frac{5}{8}$	.792	4	11	22.50
11132	$\frac{3}{4}$	1.000	4	$11\frac{1}{2}$	27.50
11133	1	1.230	4	16	34.00
11134	$1\frac{1}{4}$	1.540	4	17	50.00



Cat. No. 11121. Broken Section.



Cat. No. 11128.



BRASS ARMORED CONDUIT.—ELBOWS, TEES, ETC.

### Brass Armored Elbows with Attached Couplings.

On this page we illustrate our Brass Armored Elbows, with couplings attached, and give prices therefor. For convenience of reference we have given the fittings with couplings attached, corresponding with the like fittings without couplings appearing on preceding page.

As most elbows require two couplings, which can be better and more cheaply fitted in the factory than where the conduits are being put in, we have decided to supply our elbows in the future with the couplings attached, being convinced that our customers will prefer to order them in this way. In the lists below we give the prices for Elbows, Tees, etc., with couplings attached, as per our illustration.

### SHORT ELBOWS WITH ATTACHED COUPLINGS.

Cat No.		Price Brass Armored.
11135	$\frac{5}{16}$ inch inside diameter, per 100.....	\$18.70
11136	$\frac{3}{8}$ " " " " .....	21.50
11137	$\frac{1}{2}$ " " " " .....	25.60
11138	$\frac{5}{8}$ " " " " .....	30.00
11139	$\frac{3}{4}$ " " " " .....	43.00
11140	1 " " " " .....	63.00

LONG ELBOWS WITH ATTACHED COUPLINGS.

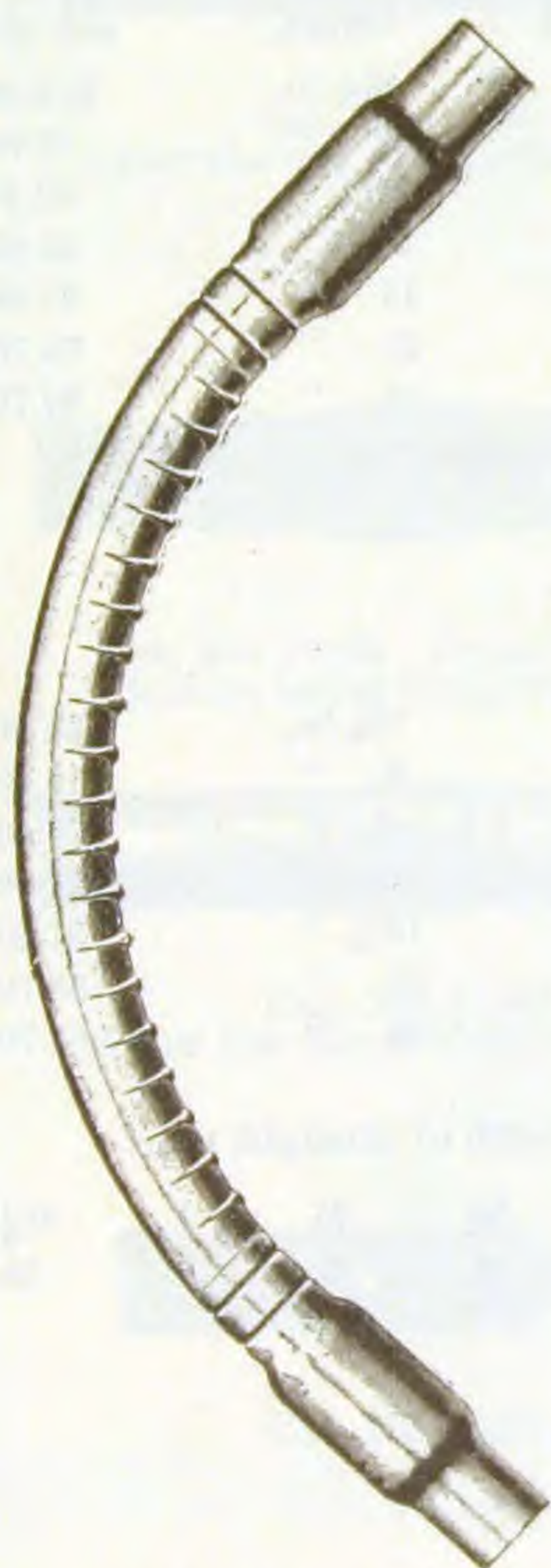
11141	$\frac{5}{16}$	inch	inside	diameter,	per	100.....	\$26.00
11142	$\frac{3}{8}$	"	"	"	"	.....	28.75
11143	$\frac{1}{2}$	"	"	"	"	.....	31.75
11144	$\frac{5}{8}$	"	"	"	"	.....	36.25
11145	$\frac{3}{4}$	"	"	"	"	.....	49.25
11146	1	"	"	"	"	.....	71.00

### S ELBOWS WITH ATTACHED COUPLINGS.

11147	$\frac{5}{16}$	inch inside diameter, per 100	\$25.75
11148	$\frac{3}{8}$	" " " "	28.25
11149	$\frac{1}{2}$	" " " "	33.00
11150	$\frac{5}{8}$	" " " "	38.50
11151	$\frac{3}{4}$	" " " "	50.50
11152	1	" " " "	64.00

## TEES WITH ATTACHED COUPLINGS.

11153	Mains	$\frac{3}{8}$ inch,	Branch	$\frac{5}{16}$ inch,	per 100	.....	\$90.75
11154	"	$\frac{1}{2}$	"	$\frac{3}{8}$	"	.....	95.00
11155	"	$\frac{5}{8}$	"	$\frac{3}{8}$	"	.....	100.00
11156	"	$\frac{5}{8}$	"	$\frac{1}{2}$	"	.....	114.00
11157	"	$\frac{3}{4}$	"	$\frac{5}{8}$	"	.....	132.00
11158	"	1	"	$\frac{3}{4}$	"	.....	167.00



Cat. No. 11135.



## BRASS ARMORED CONDUIT.

### Special Elbows.

Cat. No.	Size.	Radius of Bend.	Offset.	Price per 100.
11159	$\frac{5}{16}$ in. diameter,	3 in.	$8\frac{1}{2}$ in.	\$13.20
11160	$\frac{3}{8}$ " "	3 "	9 "	16.00
11161	$\frac{1}{2}$ " "	4 "	$11\frac{1}{4}$ "	20.40
11162	$\frac{5}{8}$ " "	4 "	12 "	23.60
11163	$\frac{3}{4}$ " "	5 "	14 "	31.20
11164	1 " "	7 "	21 "	55.70
11165	$1\frac{1}{4}$ " "	9 "	24 "	64.70

Cat. No. 11159.

11166	$\frac{5}{16}$ in. diameter,	3 in.	$7\frac{1}{2}$ in.	\$13.20
11167	$\frac{3}{8}$ " "	3 "	8 "	16.00
11168	$\frac{1}{2}$ " "	4 "	$10\frac{1}{2}$ "	20.40
11169	$\frac{5}{8}$ " "	4 "	11 "	23.60
11170	$\frac{3}{4}$ " "	5 "	$12\frac{1}{2}$ "	31.20
11171	1 " "	7 "	20 "	55.70
11172	$1\frac{1}{4}$ " "	9 "	23 "	64.70

Price per foot additional for length of straight run :

Diameter.....	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
Cents.....	5	6	7	8	9	12	15

### Return Elbow.

Cat. No.	Size Diam.	Radius of Bend.	Distance Bet. Sides.	Price per 100.
11174	$\frac{5}{16}$ in.	3 in.	6 in.	\$13.20
11175	$\frac{3}{8}$ "	4 "	8 "	16.00
11176	$\frac{1}{2}$ "	$4\frac{1}{2}$ "	9 "	20.40
11177	$\frac{5}{8}$ "	5 "	10 "	23.60
11178	$\frac{3}{4}$ "	6 "	12 "	31.20
11179	1 "	7 "	18 "	55.70
11180	$1\frac{1}{4}$ "	9 "	22 "	76.70

Cat. No. 11174.



## BRASS ARMORED CONDUIT.— COUPLINGS, TOOLS, ETC.



Cat. No. 11181. Seamless Brass.

Cat. No. 11181.  
After the use of Coupling Tool.

### Plain Coupling for Brass Armored Conduit.

Cat. No.	Size.		Price per 100.
11181	$\frac{5}{16}$	Seamless Brass, $25\frac{3}{8}$ in. long ...	\$2.00
11182	$\frac{3}{8}$	" " " " " " " " " " " "	2.00
11183	$\frac{1}{2}$	" " " " " " " " " " " "	2.25
11184	$\frac{5}{8}$	" " " " " " " " " " " "	2.35
11185	$\frac{3}{4}$	" " " " " " " " " " " "	3.25
11186	1	" " " " " " " " " " " "	4.45
11187	$1\frac{1}{4}$	" " " " " " " " " " " "	7.35
11188	$1\frac{1}{2}$	" " " " " " " " " " " "	12.00

These couplings are not provided with an insulating bushing but are made seamless. A tight joint cannot be made by crimping a coupling having a seam.

### Insulating Coupling for Brass Armored Conduit.

Cat. No.	Size.		Price per 100.
11189	$\frac{5}{16}$	Seamless Brass.....	\$3.60
11190	$\frac{3}{8}$	" " " " " " " " " " " "	3.90
11191	$\frac{1}{2}$	" " " " " " " " " " " "	4.30
11192	$\frac{5}{8}$	" " " " " " " " " " " "	4.75
11193	$\frac{3}{4}$	" " " " " " " " " " " "	7.50
11194	1	" " " " " " " " " " " "	8.60
11195	$1\frac{1}{4}$	" " " " " " " " " " " "	12.50

These couplings are provided with an inner sleeve or bushing of insulating material, and are applied in the same manner as the Standard Couplings, No. 11181, and with the same coupling tool.

Sizes given with above couplings are those of the inside diameter of the conduit tubes for which they are intended.

### Sheet Brass Clips for Conduits.

Cat. No.	Size.	Price per gross.	Cat. No.	Size.	Price per gross.
11197	$\frac{1}{4}$ inch.....	\$0.50	11201	$\frac{5}{8}$ inch.....	\$0.90
11198	$\frac{5}{16}$ " " " " " " " " " " " "	.50	11202	$\frac{3}{4}$ " " " " " " " " " " " "	1.00
11199	$\frac{3}{8}$ " " " " " " " " " " " "	.65	11203	1 " " " " " " " " " " " "	1.40
11200	$\frac{1}{2}$ " " " " " " " " " " " "	.80	11204	$1\frac{1}{4}$ " " " " " " " " " " " "	2.00

### Twisted Wire Clips for Conduits.

Cat. No.	Size.	Price per 1000.
11205	A, 4 in. long, for tubes up to $\frac{5}{8}$ in. incl.	\$4.50
11206	B, 7 " " " " " " " " " " " "	6.15

We recommend for use with these wire clips, flat-head nails which we will furnish at the following net prices.

11207 1 in., per lb. \$0.08 | 11208  $1\frac{1}{4}$  in., per lb. \$0.07

### Staple Drivers.

Cat. No.	Size.	Price each.	Cat. No.	Size.	Price each.
11209	$\frac{1}{4}$ in....	\$0.10 net.	11213	$\frac{5}{8}$ in....	\$0.16 net.
11210	$\frac{5}{16}$ " " " " " " " " " " " "	.11	11214	$\frac{3}{4}$ " " " " " " " " " " " "	.18
11211	$\frac{3}{8}$ " " " " " " " " " " " "	.12	11215	1 " " " " " " " " " " " "	.20
11212	$\frac{1}{2}$ " " " " " " " " " " " "	.14	11216	$1\frac{1}{4}$ " " " " " " " " " " " "	.24



Cat. No. 11209.

Cat. No. 11189. Cross Section.  
Before using Coupling Tool.Cat. No. 11189.  
After the use of Coupling Tool.

Cat. No. 11197.



Cat. No. 11205.





Cat. No. 11221.

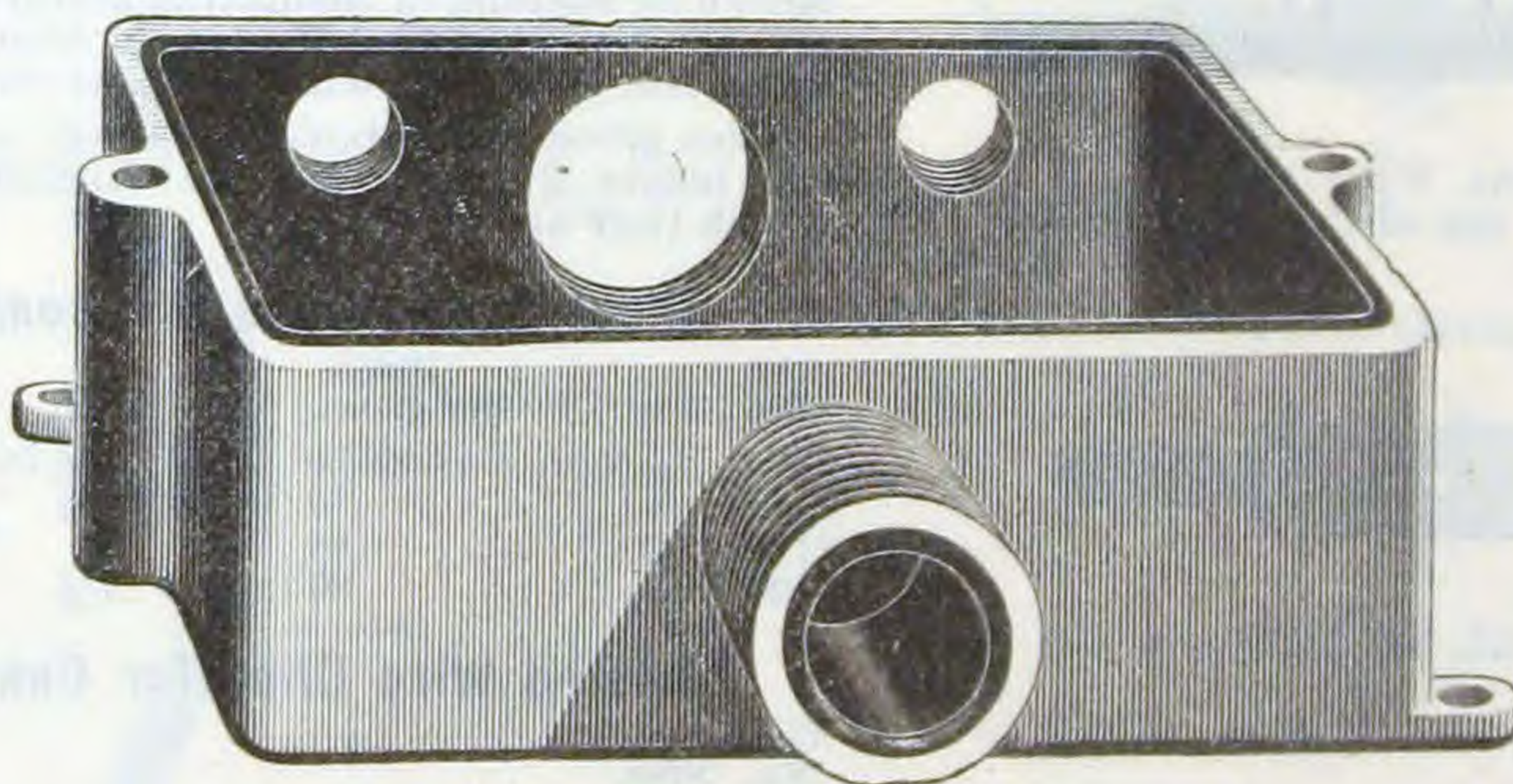
**Coupling Tools.**

Cat. No.	Size.	Price.	Cat. No.	Size.	Price.
11221	1/4 in....	\$0.90 net.	11225	5/8 in....	\$1.25 net.
11222	5/16 "....	.90 "	11226	3/4 "....	1.50 "
11223	3/8 "....	1 00 "	11227	1 "....	1.75 "
11224	1/2 "....	1.20 "	11228	1 1/4 "....	2.15 "

**Miscellaneous.**

Cat. No.	Price per lb.
11217	Staples, all sizes.....\$0.30
11218	Comp. for making joints (spec. prep.) .40
11219	Powdered Soapstone......16
11220	Fishing wire, per foot......02

## IRON AND BRASS ARMORED INSULATING CONDUIT.—BOXES.



Cat. No. 11229.

**Conduit Junction Boxes.**

*Vises, Wrenches, Cutting Tools and all other Conduit Supplies not listed, will be furnished at lowest market prices.*



## Flexible Conduit

For Interior Wiring.



Cat. No. 11230.

Cat. No.	Price.
11230 Inside diameter, $\frac{1}{4}$ inch, per foot.....	\$0.06
11231 " " $\frac{3}{8}$ " " .....	.07
11232 " " $\frac{1}{2}$ " " .....	.08
11233 " " $\frac{5}{8}$ " " .....	.10
11234 " " $\frac{3}{4}$ " " .....	.12
11235 " " 1 " " .....	.16
11236 " " $1\frac{1}{4}$ " " .....	.20

## SIZE OF COILS.

Inside diameter, $\frac{1}{4}$ inch, 250 feet; weight per 1000 ft., 90 lbs.	
" " $\frac{3}{8}$ " " " " " " " "	100 "
" " $\frac{1}{2}$ " " " " " " " "	125 "
" " $\frac{5}{8}$ " " " " " " " "	140 "
" " $\frac{3}{4}$ " " " " " " " "	175 "
" " 1 " " " " " " " "	250 "
" " $1\frac{1}{4}$ " " " " " " " "	280 "

## Hard Rubber Flexible Tubing.

Air-tight, endless, water-tight. No elbows or joints required—all one piece.

## PLAIN TUBING.

Cat. No.	Price.
11237 $\frac{1}{4}$ inch, inside diam., per foot, \$0.04	
11238 $\frac{5}{16}$ " " " " " " " "	.06 $\frac{3}{4}$
11239 $\frac{3}{8}$ " " " " " " " "	.07
11240 $\frac{1}{2}$ " " " " " " " "	.09
11241 $\frac{5}{8}$ " " " " " " " "	.11
11242 $\frac{3}{4}$ " " " " " " " "	.14
11243 1 " " " " " " " "	.18



Cat. No. 11244.

## LEAD ARMORED TUBING.

11244 $\frac{1}{4}$ inch, inside diam., per foot, \$0.05 $\frac{1}{2}$	
11245 $\frac{5}{16}$ " " " " " " " "	.08 $\frac{1}{2}$
11246 $\frac{3}{8}$ " " " " " " " "	.09 $\frac{1}{2}$
11247 $\frac{1}{2}$ " " " " " " " "	.11 $\frac{1}{2}$
1 248 $\frac{5}{8}$ " " " " " " " "	.13 $\frac{1}{2}$
11249 $\frac{3}{4}$ " " " " " " " "	.17 $\frac{1}{2}$
11250 1 " " " " " " " "	.30

We can furnish this conduit in lengths up to 3,000 feet.



## Grimshaw White Core Wire.

SOLID CONDUCTOR, DOUBLE COATED, TAPED,  
BLACK OR WHITE BRAID.



Cat. No.	B. & S. Gauge.	Safe Carrying Capacity, Bare Wire, 120° F.	Circular Mils. (d2) 1 Mil. = .001 inch.	Outside Diam. of Insulation, .001 inch.	Price per 100 Ft.
11251	18	6	1624.	.125	\$1.90
11252	18	6	1624.	.156	2.00
11253	16	10	2583.	.125	2.15
11254	16	10	2583.	.156	2.20
11255	14	15	4107.	.187	2.70
11256	14	15	4107.	.218	3.00
11257	12	21	6530.	.218	3.50
11258	12	21	6530.	.250	3.70
11259	10	32	10381.	.250	4.50
11260	10	32	10381.	.281	5.00
11261	8	44	16509.	.281	5.50
11262	8	44	16509.	.343	6.50
11263	6	60	26250.	.343	8.25
11264	6	60	26250.	.406	9.50
11265	5	68	33102.	.406	9.90
11266	5	68	33102.	.468	10.25
11267	4	83	41742.	.406	10.50
11268	4	83	41742.	.468	12.50
11269	3	104	52634.	.437	12.75
11270	3	104	52634.	.500	14.25
11271	2	118	66373.	.468	15.75
11272	2	118	66373.	.531	17.25
11273	1	135	83694.	.500	21.00
11274	1	135	83694.	.562	23.00
11275	0	179	105592.	.531	27.25
11276	0	179	105592.	.53	30.75

### STRANDED CONDUCTORS.

12257½	8	44	16509.	.343	8.00
12258½	6	60	26250.	.375	9.50
12259½	6	60	26250.	.437	11.00
12260½	5	68	33102.	.461	12.00
12261½	4	83	41742.	.461	14.50
12262½	4	83	41742.	.523	16.00
12263½	3	104	52634.	.483	18.00
12264½	3	104	52634.	.545	19.50
12265½	2	118	66373.	.539	20.00
12266½	2	118	66373.	.601	23.00
12267½	1	135	83694.	.544	27.00
12268½	1	135	83694.	.606	30.00
12269½	0	179	105592.	.593	30.00
12270½	0	179	105592.	.656	35.50
12271½	00	210	133079.	.656	38.00
12272½	00	210	133079.	.718	43.00
12273½	000	251	167805.	.718	48.00
12274½	000	251	167805.	.791	53.00
12275½	0000	275	211600.	.718	58.00
12276½	0000	275	211600.	.791	63.00



## Grimshaw Raven Core Wire.

SOLID CONDUCTOR, BRAIDED.

Cat. No.	B. & S. Gauge.	Safe Carry'g Capacity, Bare Wire in Amp. 120° F.	Circular Mils. (d2) 1 Mil. = .001 inch.	Outside Diam. of Insulat'n, .001 inch.	Price, 100 Ft.
11277	18	6	1624.	.125	\$1.65
11278	18	6	1624.	.156	1.75
11279	16	10	2583.	.125	1.75
11280	16	10	2583.	.156	1.85
11281	14	15	4107.	.156	2.10
11282	14	15	4107.	.187	2.30
11283	12	21	6530.	.218	3.25
11284	12	21	6530.	.250	3.55
11285	10	32	10381.	.218	4.00
11286	10	32	10381.	.250	4.10
11287	8	44	16509.	.281	4.75
11288	8	44	16509.	.343	5.75
11289	6	60	26250.	.343	6.50
11290	6	60	26250.	.406	8.40
11291	5	68	33102.	.406	8.90
11292	5	68	33102.	.468	9.50
11293	4	83	41742.	.406	9.60
11294	4	83	41742.	.468	11.50
11295	3	104	52634.	.437	11.25
11296	3	104	52634.	.500	12.75
11297	2	118	66373.	.468	14.75
11298	2	118	66373.	.531	16.25
11299	1	135	83694.	.500	19.00
11300	1	135	83694.	.562	21.00
11301	0	179	105592.	.531	26.25
11302	0	179	105592.	.592	29.75





## Grimshaw Raven Core Wire.

## STRANDED.



Cat. No.	B. & S. Gauge.	Safe Carrying Capacity, Bare Wire, in Amp. 120° F.	Circular Mils. (d2) 1 Mil. = .001 inch.	Outside Diam. of Insulation, .001 inch.	Price per 100 Ft.
11303	8	44	16509.	.343	\$6.25
11304	6	60	26250.	.375	7.75
11305	6	60	26250.	.437	9.00
11306	5	68	33102.	.461	9.75
11307	4	83	41742.	.461	12.00
11308	4	83	41742.	.523	15.00
11309	3	104	52634.	.483	16.60
11310	3	104	52634.	.545	18.00
11311	2	118	66373.	.539	19.00
11312	2	118	66373.	.601	22.00
11313	1	135	83694.	.544	26.00
11314	1	135	83694.	.606	29.00
11315	0	179	105592.	.593	28.25
11316	0	179	105592.	.656	32.15
11317	00	210	133079.	.656	26.00
11318	00	210	133079.	.718	41.00
11319	000	251	167805.	.718	42.50
11320	000	251	167805.	.729	47.50
11321	0000	275	211600.	.718	55.00
11322	0000	275	211600.	.791	60.00



**Paranite Double Rubber Insulation.**

SOLID CONDUCTOR.—WHITE CORE.

BRAIDED OUTSIDE.

Insulation Resistance, 1200 to 1500 Megohms.

For Electric Light, Underground, Telegraph, Telephone and all Inside Wiring.



Cat. No.	Size, E. & S. Gauge.	Insulated and Braided to	Price per 100 Feet.
11323	18	4-32	\$ 2.55
11324	18	5-32	2.65
11325	16	5-32	3.85
11326	16	6-32	3.95
11327	14	6-32	3.50
11328	14	7-32	3.90
11329	12	7-32	4.50
11330	12	8-32	4.55
11331	10	8-32	5.75
11332	10	9-32	6.50
11333	9	8-32	6.50
11334	8	9-32	7.40
11335	8	10-32	8.20
11336	6	10-32	10.50
11337	6	11-32	11.55
11338	5	12-32	12.80
11339	4	12-32	13.40
11340	4	12-32	15.00
11341	3	16-32	18.50
11342	2	16-32	21.40
11343	2	17-32	23.25
11344	1	17-32	26.35
11345	1	18-32	31.00
11346	0	18-32	35.00
11347	0	20-32	42.25



## Grimshaw Raven Core Wire.

## STRANDED.



Cat. No.	B. & S. Gauge.	Safe Carrying Capacity, Bare Wire, in Amp. 120° F.	Circular Mils. (d2) 1 Mil. = .001 inch.	Outside Diam. of Insulation, .001 inch.	Price per 100 Ft.
11303	8	44	16509.	.343	\$6.25
11304	6	60	26250.	.375	7.75
11305	6	60	26250.	.437	9.00
11306	5	68	33102.	.461	9.75
11307	4	83	41742.	.461	12.00
11308	4	83	41742.	.523	15.00
11309	3	104	52634.	.483	16.60
11310	3	104	52634.	.545	18.00
11311	2	118	66373.	.539	19.00
11312	2	118	66373.	.601	22.00
11313	1	135	83694.	.544	26.00
11314	1	135	83694.	.606	29.00
11315	0	179	105592.	.593	28.25
11316	0	179	105592.	.656	32.15
11317	00	210	133079.	.656	26.00
11318	00	210	133079.	.718	41.00
11319	000	251	167805.	.718	42.50
11320	000	251	167805.	.729	47.50
11321	0000	275	211600.	.718	55.00
11322	0000	275	211600.	.791	60.00



**Paranite Double Rubber Insulation.**

SOLID CONDUCTOR.—WHITE CORE.

BRAIDED OUTSIDE.

Insulation Resistance, 1200 to 1500 Megohms.

For Electric Light, Underground, Telegraph, Telephone and all Inside Wiring.



Cat. No.	Size, B. & S. Gauge.	Insulated and Braided to	Price per 100 Feet.
1 323	18	4-32	\$ 2.55
11324	18	5-32	2.65
11325	16	5-32	2.85
11326	16	6-32	2.95
11327	14	6-32	3.50
11328	14	7-32	3.90
11329	12	7-32	4.50
11330	12	8-32	4.75
11331	10	8-32	5.75
11332	10	9-32	6.50
11333	9	8-32	6.50
11334	8	9-32	7.10
11335	8	10-32	8.20
11336	6	10-32	10.50
11337	6	11-32	11.75
11338	5	12-32	12.30
11339	4	12-32	13.40
11340	4	12-32	15.00
11341	3	16-32	18.50
11342	2	16-32	21.40
11343	2	17-32	23.25
11344	1	17-32	28.35
11345	1	18-32	31.00
11346	0	18-32	36.00
11347	0	20-32	42.26



## Paranite Double Rubber Insulation.

STRANDED.—WHITE CORE.

For Electric Light and Power use.



Cat. No.	Size, B. & S. Gauge.	Style of Strands.	Outside Diameter.	Price 100 Feet
11348	18	3 x 23 B. & S.	5-32	\$4.72
11349	16	3 x 21 "	6-32	5.30
11350	14	3 x 18 "	7-32	5.90
11351	12	7 x 20 "	8-32	7.00
11352	10	7 x 18 "	9-32	7.75
11353	9	7 x 17 "	9-32	8.25
11354	8	7 x 16 "	10-32	9.50
11355	7	7 x 15 "	10-32	10.50
11356	6	7 x 14 "	11-32	11.80
11357	5	7 x 14 "	12-32	15.00
11358	4	7 x 12 "	13-32	17.70
11359	3	7 x 11 "	14-32	23.60
11360	2	19 x 15 "	16-32	25.25
11361	1	19 x 14 "	17-32	23.00
11362	0	19 x 13 "	18-32	37.75
11363	00	19 x 12 "	19-32	47.00
11364	000	19 x 11 "	21-32	58.00
11365	0000	19 x 10 "	24-32	70.00



**Paranite Double Rubber Insulation.****FLEXIBLE.**

Insulation Resistance 1200 to 1500 Megohms.

**WHITE CORE—BRAIDED.**

For Switch Boards and Dynamos and Electric Light and Railways.



Cat. No.	Size, B. & S. Gauge.	Style of Strands.	Price 100 Ft.
11366	14	14 x 25 B. & S.	\$7.00
11367	12	21 x 25 "	8.00
11368	10	21 x 23 "	8.50
11369	9	21 x 22 "	9.00
11370	8	49 x 25 "	10.25
11371	7	49 x 24 "	11.50
11372	6	49 x 23 "	12.50
11373	5	49 x 22 "	15.00
11374	4	49 x 21 "	18.25
11375	3	49 x 20 "	22.75
11376	2	49 x 19 "	27.25
11377	1	133 x 22 "	36.50
11378	0	133 x 21 "	45.00
11379	00	133 x 20 "	56.00
11380	000	343 x 23 "	70.00
11381	0000	343 x 22 "	85.00



## Bishop White Core Wire.

### MEDIUM INSULATION.

Covered with two good coats of rubber compound and protected by tape or braid. Suitable for all inside wiring and equal to the best made by other parties for Breweries, Stations or other high-class work. Complies with the Underwriters' requirements. Safe for 1,000 volts.



Cat. No.	B. & S. Gauge.	Outside Diameter of Solids 32d inch.	Price per Hundred Feet.				
			Taped or Braided.			Lead Incased.	
			Solid.	Strand.	Flexible.	Solid.	Strand.
11382	18	4½	\$2.00	\$2.25	\$2.50	\$4.30	\$4.60
11383	16	5	2.20	2.50	2.75	4.75	5.00
11384	14	6	2.70	3.50	4.00	5.85	6.70
11385	12	7	3.50	4.50	5.00	7.00	8.25
11386	10	8	5.00	5.50	6.50	9.00	9.75
11387	8	9	6.00	7.50	8.50	10.30	12.25
11388	6	10	8.75	10.00	11.50	13.50	15.00
11389	5	11	10.50	12.00	14.00	15.50	17.50
11390	4	12	13.00	14.50	17.00	21.00	23.00
11391	3	14	16.50	18.50	21.00	25.25	27.75
11392	2	15	20.00	22.00	25.00	29.25	31.75
11393	1	16	24.00	27.00	30.00	36.50	40.00
11394	0	17	28.00	32.00	36.00	41.25	46.00
11395	00	19	36.00	40.00	45.00	50.50	55.00
11396	000	20	43.00	47.00	55.00	58.00	63.50
11397	0000	22	54.00	58.00	65.00	70.50	76.00



**Bishop White Core Wire.****HEAVY INSULATION.**

Warranted to stand 3,000 volts. These wires may be buried in walls or foundations, in the ground or under water, and are the very best for inside wiring of stations, breweries or other buildings, or for leading-in. It pays in the end to use them.

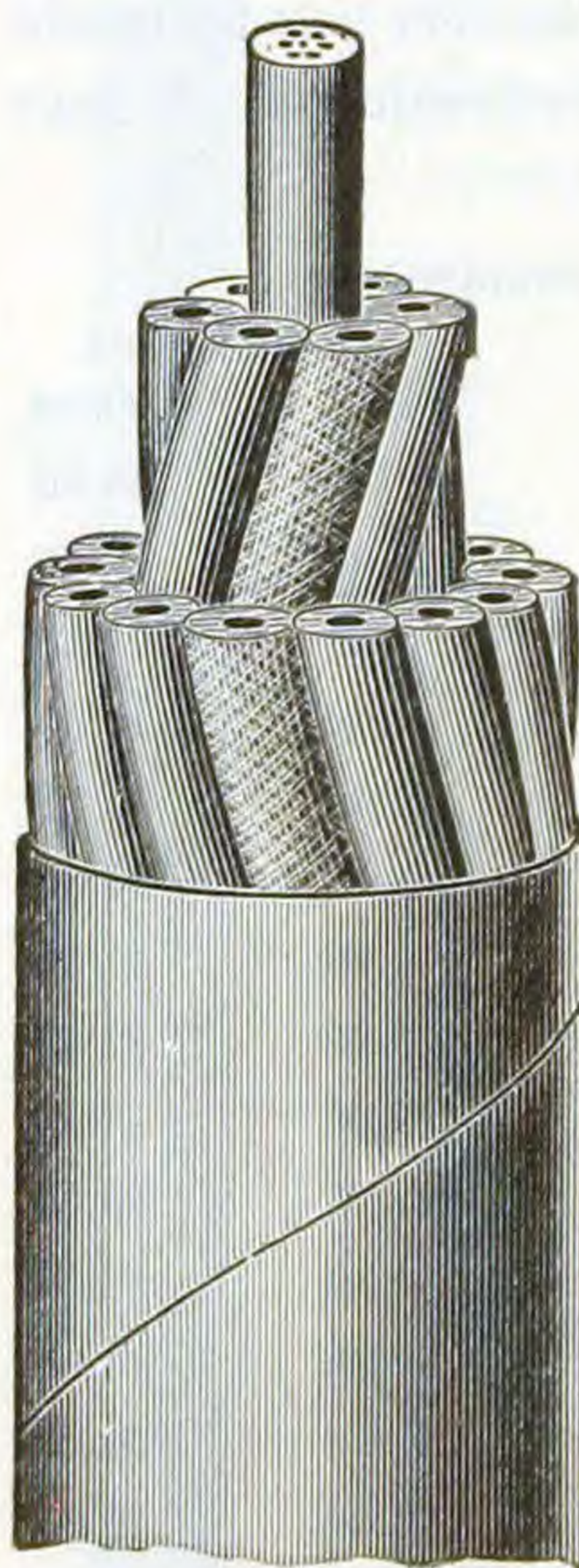


Cat. No.	B. & S. Gauge.	Outside Diameter in Solids in 32d inch.	Price per Hundred Feet.			
			Taped or Braided.		Lead Incased.	
			Solid.	Strand.	Solid.	Strand.
11398	18	5	\$2.25	\$2.50	\$4.80	\$5.00
11399	16	6	2.75	3.20	5.90	6.35
11400	14	7	3.50	4.00	7.00	7.50
11401	12	8	4.50	5.50	8.50	10.00
11402	10	9	6.00	7.00	10.30	11.75
11403	8	10	7.50	9.00	12.25	14.00
11404	6	11	10.50	11.50	15.50	17.00
11405	5	12	12.50	14.00	20.00	22.00
11406	4	13	15.00	16.50	23.00	25.00
11407	3	15	18.00	20.00	27.25	29.75
11408	2	16	22.00	24.00	34.50	37.00
11409	1	17	26.00	29.00	39.25	43.00
11410	0	18	32.00	35.00	47.00	51.00
11411	00	20	40.00	43.00	55.00	59.50
11412	000	22	47.00	50.00	63.50	68.00
11413	0000	24	60.00	64.00	78.00	84.00

These prices are for pure lead. If 3 per cent. tin is required, it adds 10 per cent. to cost of lead.



### Habirshaw White Core Wires.



Cat. No.	Gauge B. & S.	Outside Diameter Solid Wire 32d inch.	Solid Taped, or Braided Conductor Per 100 Ft.	Stranded Taped, or Braided Conductor Per 100 Ft.	Flexible Taped, or Braided Conductor Per 100 Ft.
11414	18	4	\$1.68	\$1.90	\$2.15
11415	16	5½	1.78	2.25	2.55
11416	14	6	2.33	2.70	3.05
11417	12	7	3.30	3.70	4.20
11418	10	8	4.15	4.70	5.30
11419	8	9	4.80	6.40	7.20
11420	6	10	6.58	7.85	8.85
11421	5	12	9.00	9.85	11.10
11422	4	13	9.70	12.15	13.70
11423	3	13½	11.40	16.80	18.90
11424	2	14½	14.90	19.25	21.65
11425	1	15½	19.30	26.50	29.85
11426	0	16½	26.60	28.60	32.20
11427	00	....	.....	36.50	41.10
11428	000	....	.....	43.00	48.40
11429	0000	....	.....	55.70	62.00

NOTE.—Outside diameter of Stranded and Flexible Wires given on application.





## Electrolier Wires.

### SINGLE CONDUCTOR.

Cat. No.	B. & S. Gauge.	Outside Diameter of Solids in 32d inch.	Price per 100 Feet, Taped or Braided.				
			Solid.	Strand.	Flat Duplex.		
					32d in. Diam. of Solid.	Solid.	Strand.
11430	18	3½	\$1.65	\$2.00	8	\$3.90	\$4.60
11431	16	4	1.80	2.25	9	4.25	5.20
11432	14	5	2.50	3.00	11	5.50	6.50
11433	12	5½	3.30	4.00	12	7.50	9.00
11434	10	6½	4.50	5.25	14	10.00	11.50
11435	8	8	6.00	7.00	17	13.00	14.00
11436	6	9	8.50	9.75	19	18.50	21.00

Cat. No.  
11430.



### DOUBLE CONDUCTOR.

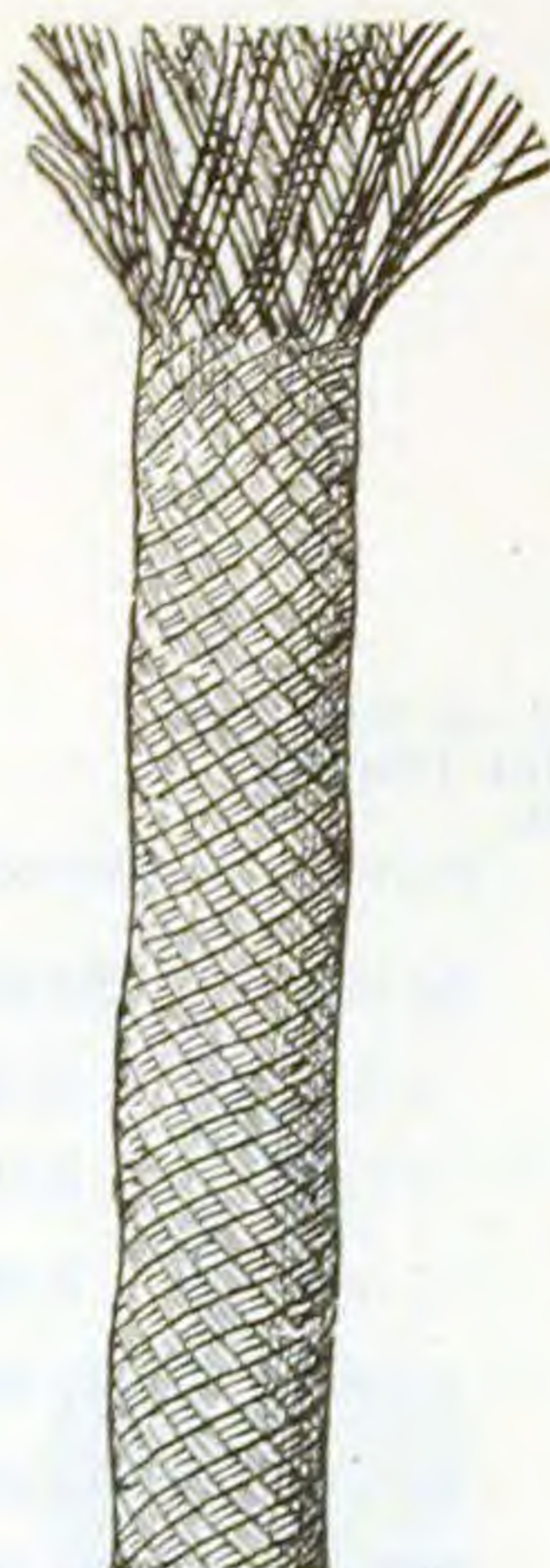
#### Flat Duplex, Medium Insulation.

Cat. No.	B. & S. Gauge.	Outside Diameter of Solids in 32d inch.	Solid.	Strand.	Lead Incased.		
					Outside Diam. of Lead in 32d inch.	Solid.	Strand.
11437	18	9	\$4.50	\$5.00	10	\$10.00	\$11.00
11438	16	11	5.00	5.50	12	11.50	12.50
11439	14	13	6.00	7.50	14	14.00	15.00
11440	12	15	8.00	9.50	16	17.00	20.00
11441	10	17	11.00	12.50	18½	20.50	23.50
11442	8	19	14.00	15.50	20½	24.50	28.00

All duplex wires are first taped or braided, and then braided together.

Cat. No.  
11437.





Cat. No. 11443.

## Special Theatre Cable.

Braided.

Double Coated Stranded.

Cat. No.	Size.		Price.
11443	18	Per foot.....	\$0.16
11444	16	" .....	.18
11445	14	" .....	.20
11446	12	" .....	.24
11447	10	" .....	.30

This is specially designed for use in connection with movable lamps, as it has a heavy, solid rubber core over the conductors which in turn are protected from abrasion or damage by a substantial braid heavily compounded.



Cat. No. 11448.

## Standard Window and Show Case Lamp Cord.

Extra Heavy Insulation.

Cat. No.	Size.		Price.
11448	18	Per foot.....	\$0.20
11449	16	" .....	.24
11450	14	" .....	.28



**Flexible Incandescent Lamp Cord.****SILK COVERED.**

Cat. No.	Gauge.	Conductor.	Price per Yd.
11451	No. 22, B. & S.	10 x 30 Wires.	\$0.12
11452	" 20, "	14 x 30 "	.12
11453	" 18, "	16 x 30 "	.16
11454	" 16, "	25 x 30 "	.19
11455	" 14, "	40 x 30 "	.29
11456	" 12, "	60 x 30 "	.40
11457	" 10, "	118 x 30 "	.50



Cat. No. 11453.

**COTTON OR WORSTED.**

	Gauge.	Conductor.	
11458	No. 22, B. & S.	10 x 30 Wires.	\$0.07
11459	" 20, "	14 x 30 "	.07
11460	" 18, "	16 x 30 "	.09
11461	" 16, "	25 x 30 "	.12
11462	" 14, "	40 x 30 "	.21
11463	" 12, "	60 x 30 "	.32
11464	" 10, "	118 x 30 "	.42

Unless otherwise specified, we furnish on orders green and gold.

**Galvanized Steel Wire Strand.**

Cat. No.	7 Wires No.	Diam.	Weight per 100 Feet.	Breaking Strength.	Per 100 Ft.
11465	8	1 1/2 in.	52 lbs.	8,320 lbs.	\$4.00
11466	9	1 1/8 "	42 "	6,720 "	3.40
11467	10	1 1/8 "	36 "	5,720 "	3.00
11468	11	7/8 "	29 "	4,640 "	2.45
11469	12	7/8 "	21 "	3,360 "	1.90
11470	13	3/4 "	16 "	2,560 "	1.50
11471	14	3/4 "	12 "	1,920 "	1.15
11472	15	3/4 "	10 "	1,600 "	1.00
11473	16	3/4 "	8 "	1,280 "	.90
11474	17	3/4 "	6 1/2 "	960 "	.70
11475	18	3/4 "	4 3/4 "	688 "	.52
11476	19	3/4 "	3 3/4 "	528 "	.43
11477	20	1/2 "	2 1/2 "	384 "	.33
11478	21	3/2 "	2 "	320 "	.30



Cat. No. 11467.

**Galvanized Arc Lamp Cord.****With Hemp Center.**

11479	No. 26,	1/4 inch,	per foot.....	\$0.04 1/2
11480	" 27,	3/32 "	" " " " " "	.03 1/2
11481	" 27 1/2,	3/16 "	" " " " " "	.02 3/4
11482	" 28,	1/8 "	" " " " " "	.02
11483	" 29,	1/16 "	" " " " " "	.01 1/2

**Samson Cordage.**

11484	Cotton,	3/2 inch diam.,	per lb.....	\$0.75
11485	" "	3/8 "	" " " " " "	.75
11486	Linen,	3/2 "	" " " " " "	1.20
11487	" "	3/8 "	" " " " " "	1.20

**Electric Light Elevator Cable.**

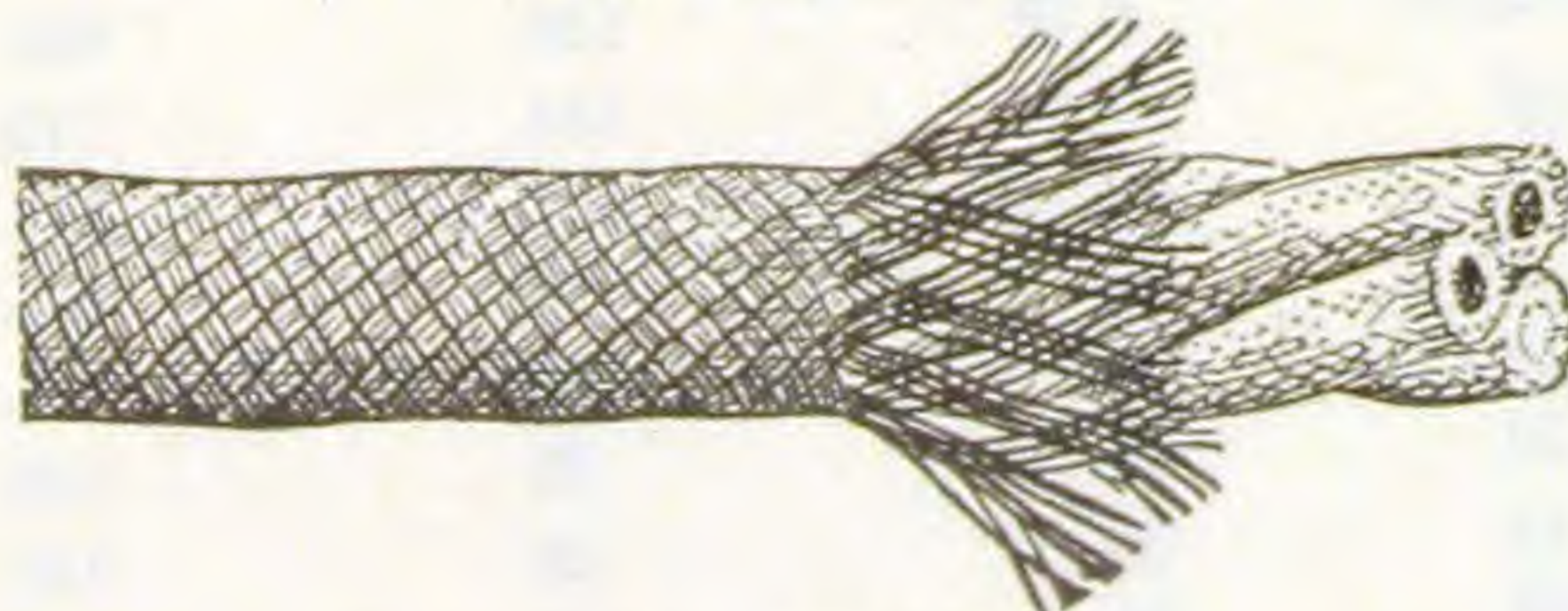
11488	Flex., 2 conductors, No. 16,	per ft....	.30
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Cat. No. 11479.



Cat. No. 11484.



Cat. No. 11488.



## Weatherproof Insulation Electric Light and Power Wire.

Our K K Insulation of weatherproof wire combines the highest degree of insulation with durability and resistance to abrasion from mechanical injury.

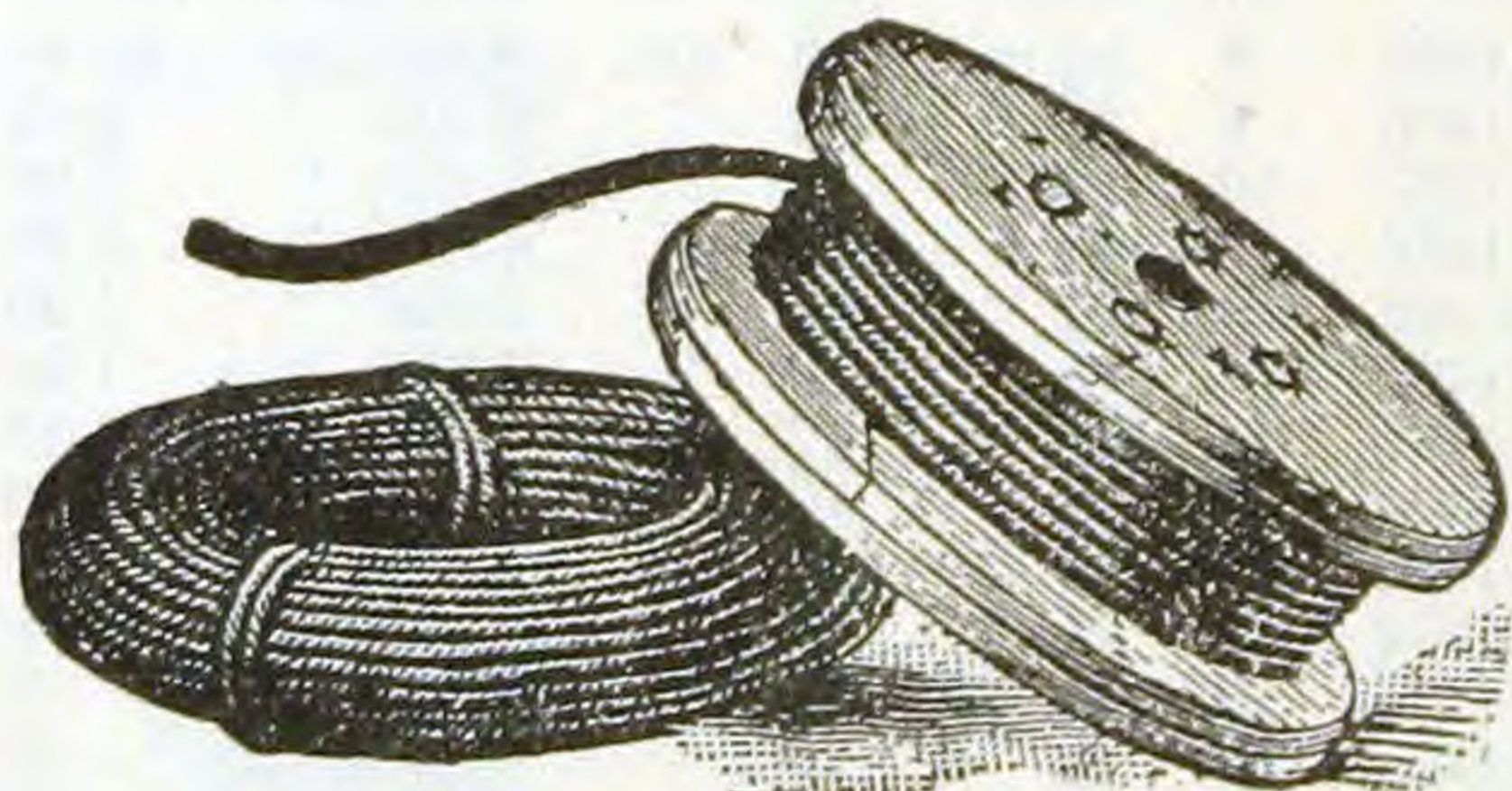
It is either double or triple braided, thoroughly saturated with compound and has a black and highly polished finish. Underwriters' wire in white finish at same prices.

Cat. No.		Price per lb.
11489	4-0 to 3 B. & S. Gauge.....	\$0.26
11490	4 to 8 " " .....	.27
11491	9 to 10 " " .....	.28
11492	11 and 12 " " .....	.30
11493	13 and 14 " " .....	.30
11494	15 and 16 " " .....	.31
11495	17 and 18 " " .....	.32
11496	19 and 20 " " .....	.34

Sizes 4-0 to 10, are furnished upon reels holding approximately 175 pounds.

Sizes 12 to 20, in coils weighing from 12 to 15 pounds each.

Reels and cases are charged upon shipment and credited at same price when returned in good condition without expense to us.



### APPROXIMATE WEIGHTS OF WEATHER- PROOF WIRE.

#### Triple Braided Insulation.

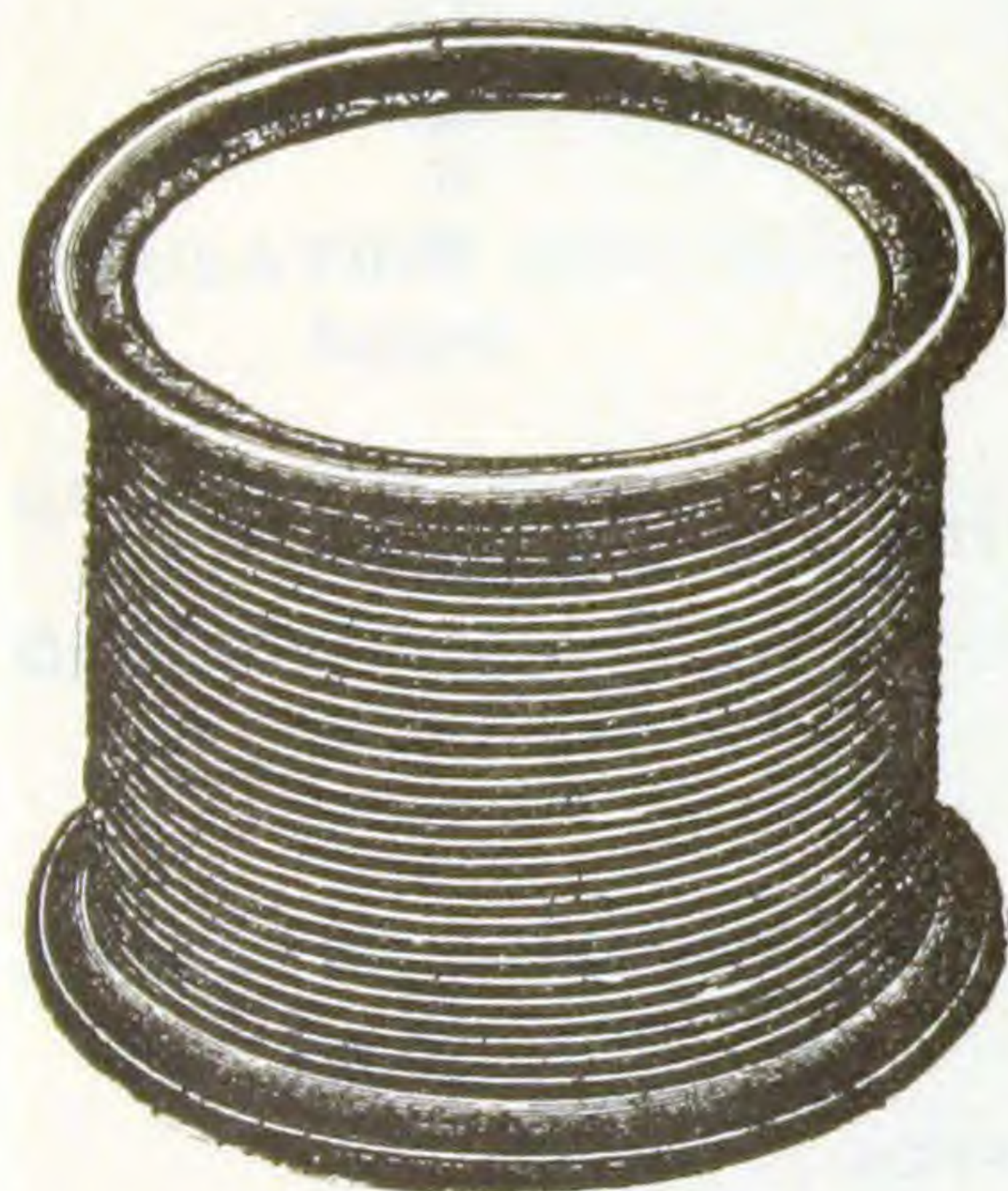
Size.	Feet per pound.	Pounds per 1000 feet.	Pounds per mile.
4-0	1.34	742	3920
3-0	1.64	609	3215
2-0	2.05	487	2570
0	2.59	386	2040
1	3.25	308	1625
2	4.10	244	1289
3	5.15	194	1025
4	6.26	160	845
5	7.46	134	710
6	9.	111	585
8	13.	73	385
10	20.	50	265
12	29.	35	182
14	38.	26	137
16	48.	21	113
18	67.	15	81



## Magnet Wire for Field and Armature.

Wire of the highest conductivity and very soft. Accurately drawn to any required diameter, and smoothly and evenly covered to any desired thickness of insulation.

Cat. No.			Price per Pound.	
			Single Wound.	Double Wound.
11497	Nos.	0000 to 0.....	\$0.34	\$0.37
11498	"	1 to 4.....	.33	.36
11499	"	5 and 6.....	.34	.37
11500	"	7 " 8.....	.37	.39
11501	"	9 " 10.....	.38	.41
11502	"	11 " 12.....	.40	.42
11503	"	13 " 14.....	.42	.46
11504	"	15 " 16.....	.44	.48
11505	"	17 " 18.....	.45	.49
11506	"	19.....	.46	.50



No. B. & S. Gauge.	COTTON.		SILK.	
	Single.	Double.	Single.	Double.
16	.....	.....	\$1.12	\$1.53
17	.....	.....	1.12	1.53
18	.....	.....	1.15	1.57
19	.....	.....	1.15	1.57
20	\$0.60	\$0.74	1.18	1.61
21	.70	.88	1.20	1.63
22	.76	.95	1.30	1.76
23	.83	1.05	1.42	1.93
24	.90	1.14	1.56	2.13
25	1.00	1.27	1.81	2.48
26	1.10	1.38	2.10	2.88
27	1.25	1.57	2.25	3.07
28	1.35	1.69	2.38	3.23
29	1.50	1.89	2.75	3.76
30	1.65	2.07	2.95	4.02
31	1.80	2.23	3.25	4.40
32	1.95	2.28	3.45	4.53
33	2.40	2.85	3.90	5.10
34	2.85	3.42	4.10	5.30
35	3.25	3.88	5.85	7.78
36	4.37	4.93	7.00	8.88
37	6.75	7.25	11.00	13.63
38	9.00	9.50	13.00	14.50
39	11.00	12.00	15.00	18.00
40	13.00	15.00	20.00	23.00

Special prices made for triple and quadruple winding.

We also furnish square, flat and rectangular wires in any desired insulation. The variety of sizes is so great that it is difficult to list them, and we shall be pleased to furnish prices upon application.

Reels and cases are charged upon shipment, and credited at same price when returned in good condition without expense to us.



**WIRING DATA.****Equivalents of Wires, B. & S. Gauge.**

B. & S.	C. M. (D2.)	Ohms per 1000 Ft.	Carrying Capacity in Amperes.
0000	211600.	.04904	218
000	167805.	.06184	181
00	133079.9	.07797	150
0	105592.5	.09827	125
1	83694.5	.12398	105
2	66373.2	.15633	88
3	52633.5	.19714	75
4	41742.6	.24858	63
6	26250.5	.39528	45
8	16508.7	.62849	33
10	10381.6	.99948	25
12	6529.94	1.5890	17
14	4106.76	2.5266	12

**Formulæ for Wiring.****2 WIRE SYSTEM.**

$$\frac{21.21 \times D. \times A.}{\text{Volts lost}} = \text{C. M.}$$

$$\frac{D. \times 21.21 \times A.}{\text{C. M.}} = \text{Volts lost.}$$

÷ BY 4 FOR 3 WIRE SYSTEM.

D = Distance one way in ft.

21.21 = Resistance 2 mill. ft.

A = Amperes.

C. M. = Circular Mills.

746 Watts. = 1 H. P.

$$\frac{\text{H. P.} \times 746}{\text{Voltage}} = \text{Amperes.}$$

**Ohms Law.**

$$C = \frac{E}{R} \quad R = \frac{E}{C} \quad - E = C \times R.$$

C = Current in Amperes.

R = Resistance in Ohms.



## FIXTURES.

We solicit correspondence on Fixtures of special design which may not be illustrated here.

**SOCKETS.**—The prices of fixtures do not include sockets.

**WIRING.** Wiring is not included in the prices unless it is expressly so stated; but we shall be pleased to undertake the wiring of any fixtures, if our customers desire it, at cost price.

**INSULATING JOINTS.**—Insulating joints are included in the prices of combination fixtures.

**CUT-OUTS.**—Fixture cut-outs are in no case included in the prices.

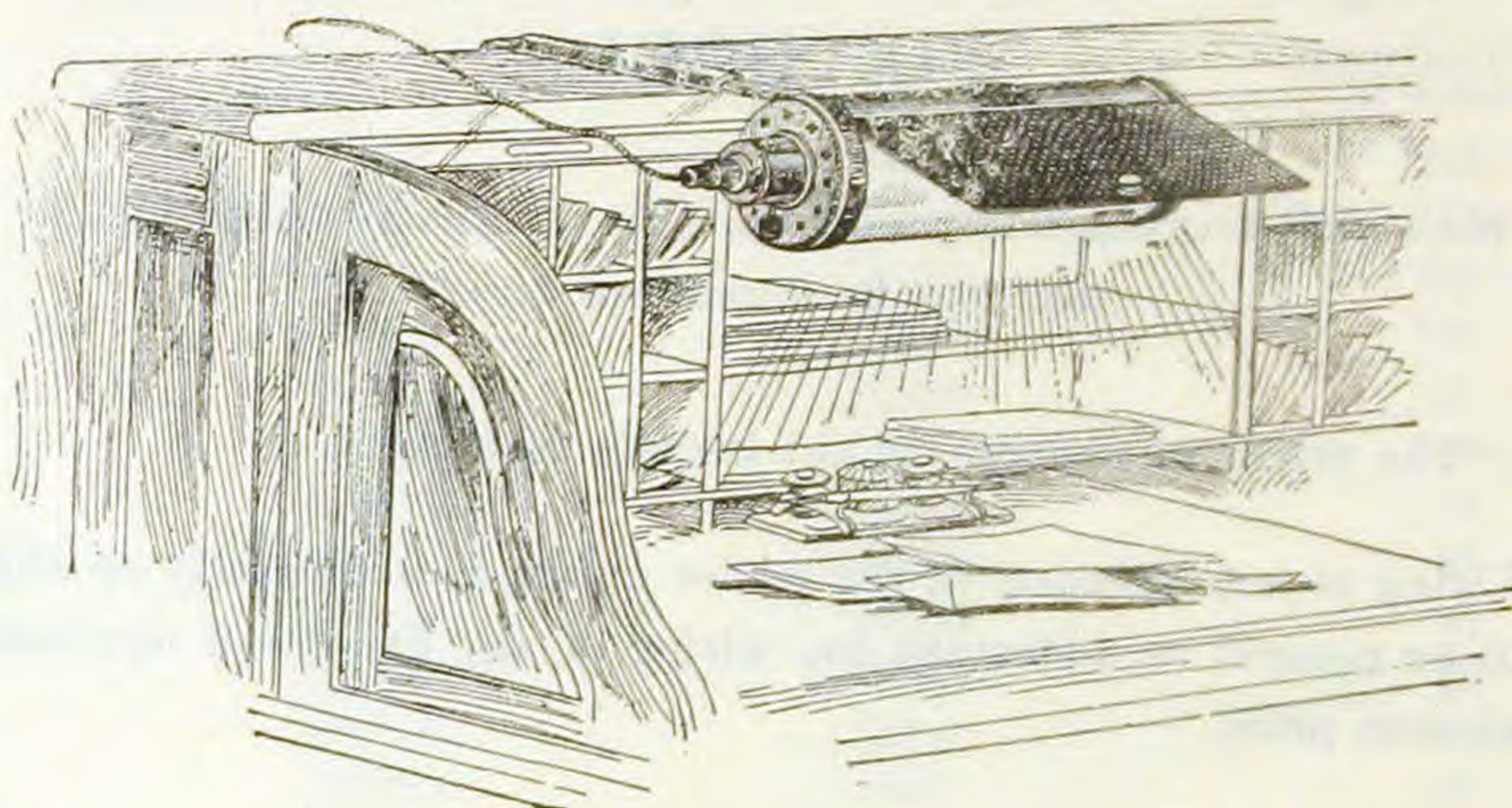
**GLOBES, SHADES AND HOLDERS.**—Globes, shades and holders are not included in prices of fixtures unless otherwise stated. Gas burners and holders for gas globes are included in the prices of combination fixtures.

**FINISH.**—The prices are understood to be for polished brass, old brass, rich gilt or jet black; but we have every facility for supplying fixtures in nickel, silver, steel, copper and bronze platings at a reasonable extra charge. We will also undertake refinishing of socket shells and holders to match fixtures.

**OLD FIXTURES.**—We are frequently asked if old gas fixtures can be properly changed into electric. We have undertaken a great deal of such work, in many cases on fixtures of great value, and the result has always been satisfactory to our customers. Any gas fixture can be so changed without destroying its form or marring its finish. Our price for this special work will be found very reasonable.



## KINSMAN DESK LIGHT.



Cat. No. 11507.

The eye shade, which serves as a reflector as well, may be moved by a touch to any desired angle.

The inner glass cylinder has one clear glass surface, and one of ground glass, to soften the light if desired. Turned by a knob at further side.

There is an adjustable arm enabling the light to be drawn forward or pushed back at pleasure.

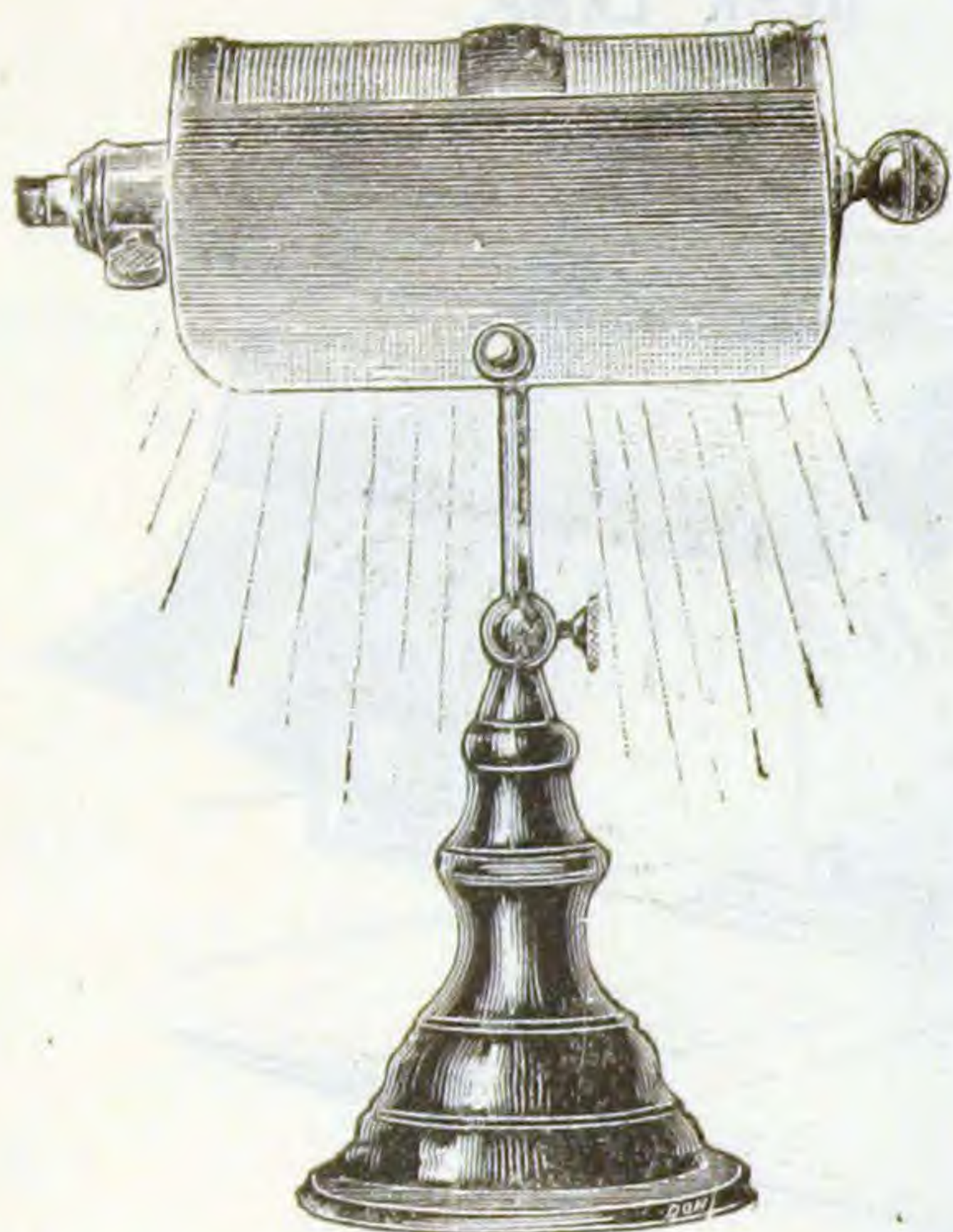
All these changes in use may be made readily, without rising from one's chair. The fixture may be clamped to the desk without marring it.

NOTE.—The Kinsman Desk Lights and Portables of all finishes are now furnished with adjustable socket-holders, so that it is not necessary to know the style of socket desired. This meets with the objection of having to carry a stock of fixtures with the various styles of sockets to supply the demand.

**Prices of Fixtures do not include Sockets or Lamps.**

Cat. No.		Price
11507	Kinsman Desk Light, polished brass or nickel-plated.....	\$6.00
11508	Kinsman Desk Light, dark green enamel with gold striping.....	3.75



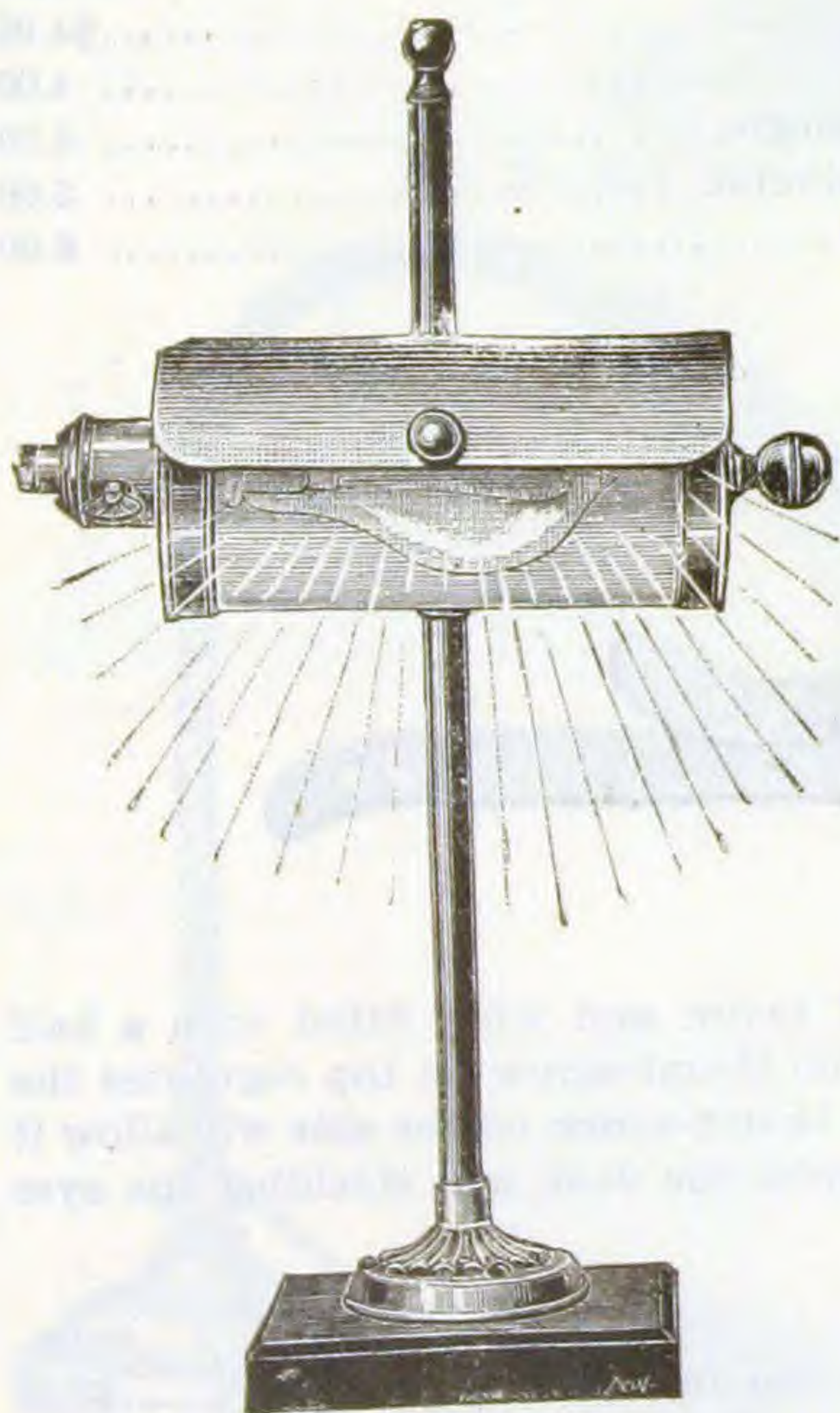


Cat. No. 11509.

### The Kinsman Portables.

Cat. No.	Price.
11509 Kinsman Portable, polished brass or nickel-plated.....	\$8.00
11510 Kinsman Portable, dark green enamel with gold striping.....	5.00

NOTE.—The Kinsman Desk Lights and Portables of all finishes are now furnished with adjustable socket-holders, so that it is not necessary to know the style of socket desired. This meets the objection of having to carry a stock of fixtures with the various styles of sockets to supply the demand. Prices of fixtures do not include sockets or lamps.



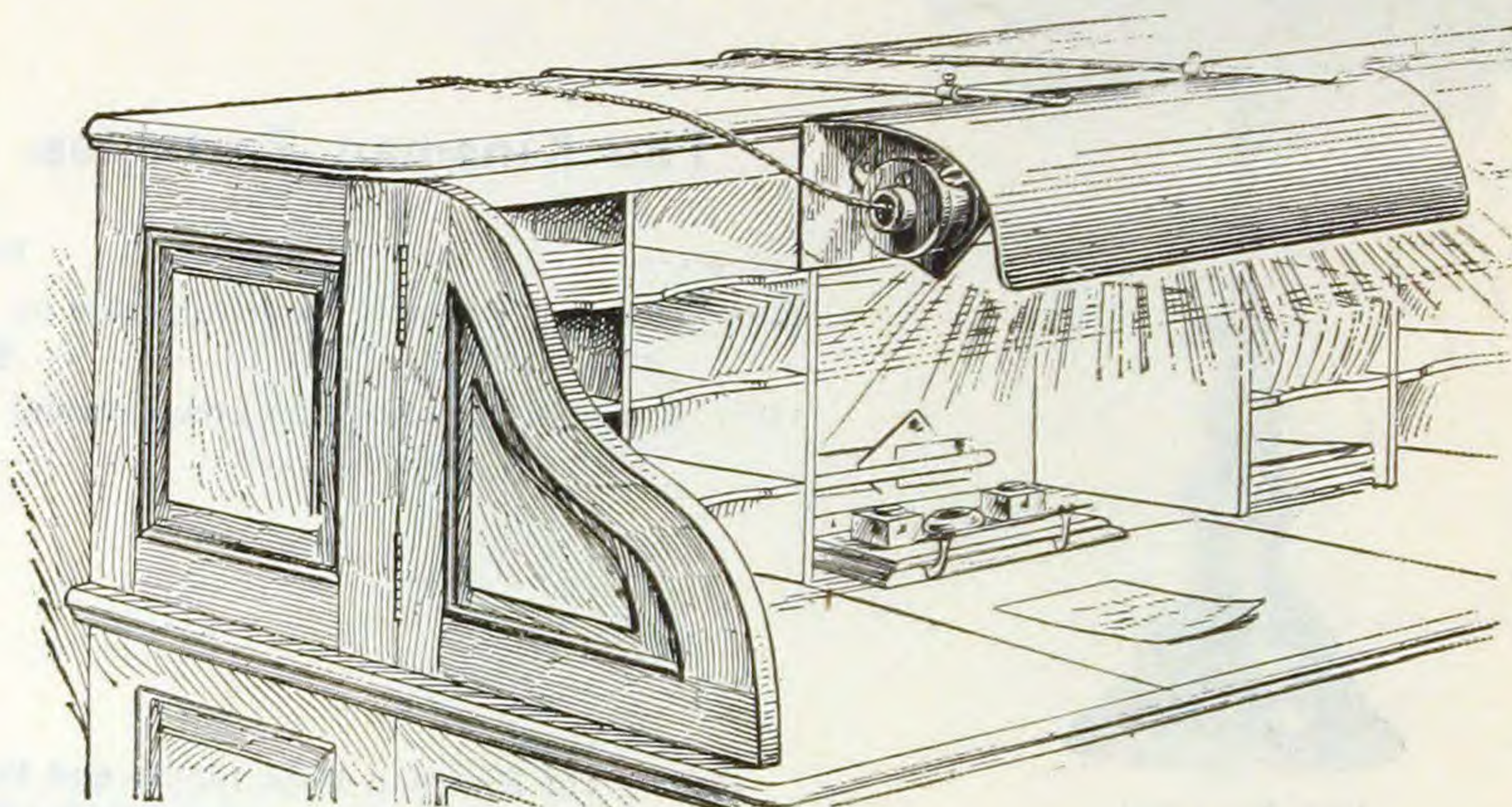
Cat. No. 11511.

11511 Kinsman Portable, polished brass or nickel-plated ...	\$7.00
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## THE KINSMAN "DAYLIGHT" DESK LAMP.

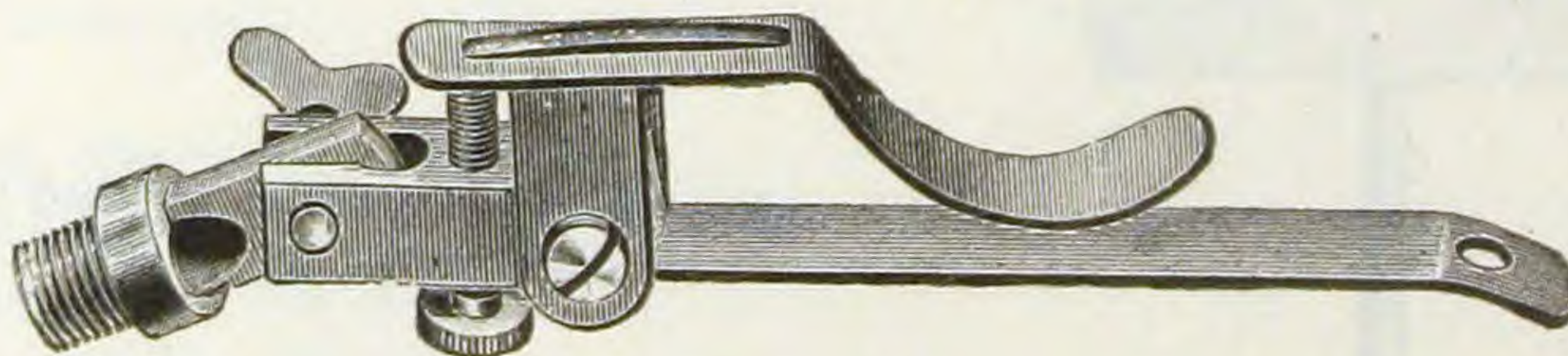
PARABOLA EFFECT.



Cat. No. 11512.

Cat. No.		Price.
11512	Adjustable "Roll Top" Desk Lamp, complete .....	\$4.00
11513	Book-keeper's Upright " " " " .....	4.00
11514	Adjustable "Flat Top" " " " " single.....	4.00
11515	" " " " " " " " double.....	5.00
11516	" " "Library" Table " " .....	6.00

## Desk Clamp.

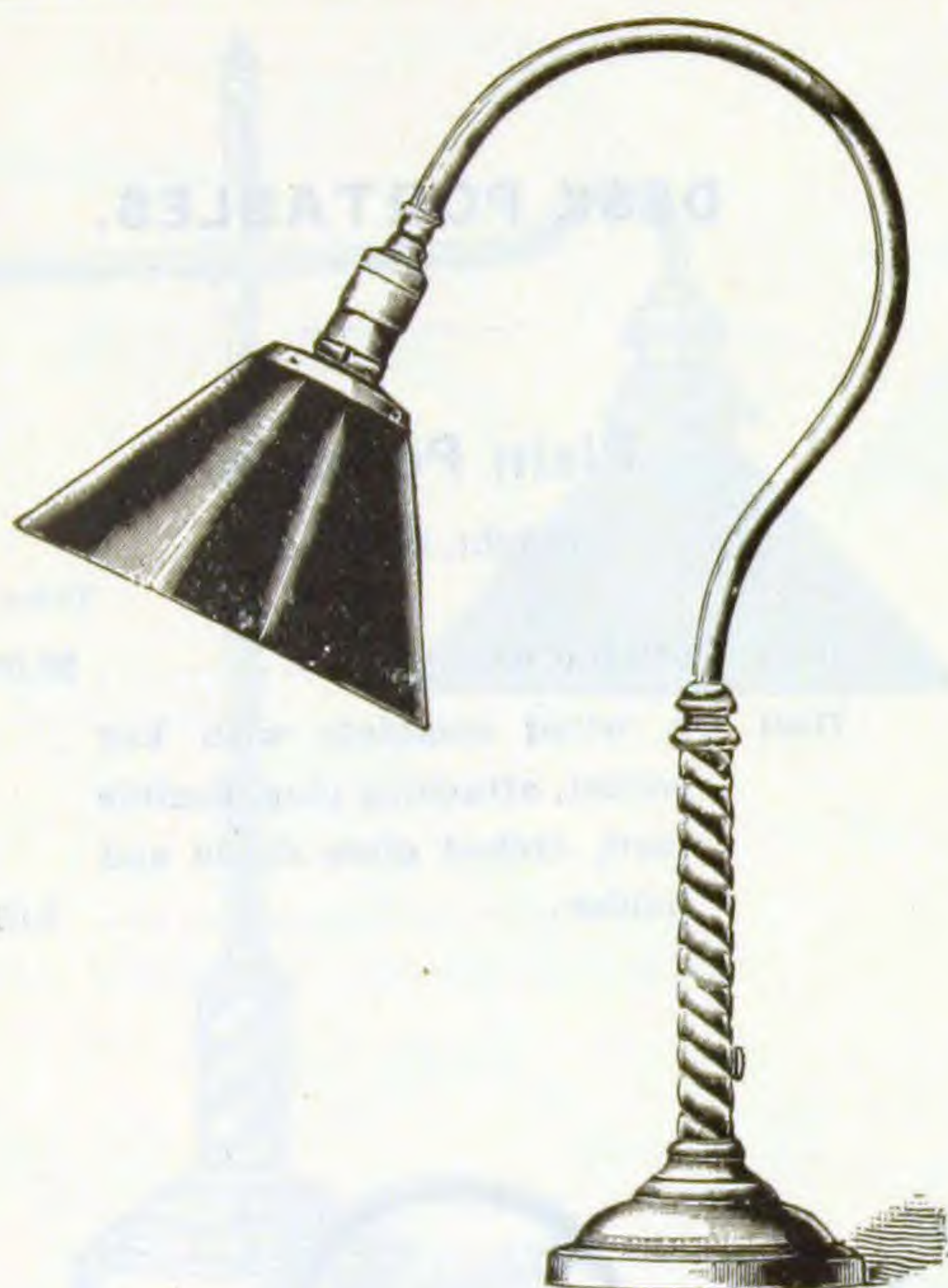


Cat. No. 11518.

This simple device has met with a great deal of favor, and when fitted with a half reflector shade it is absolutely a perfect desk light. The thumb-screw on top regulates the clamp so that it will fit any thickness of shelf, and the thumb-screw on the side will allow it to be set at any angle, throwing the light directly upon the desk and shielding the eyes completely.

Cat. No.		Price.
11517	Desk Clamp, complete, with Half-Shade, Socket Cord and Attaching Plug.....	\$2.25
11518	Desk Clamp only.....	.70





Cat. No. 11520.

## DESK PORTABLES.

### Portable.

Height, 24 inches.

Cat. No.	Price.
11519	Portable only.....\$3.00
11520	Or, wired complete with key socket, attaching plug, flexible cord and glass or celluloid shade, green outside, with holder 5.50

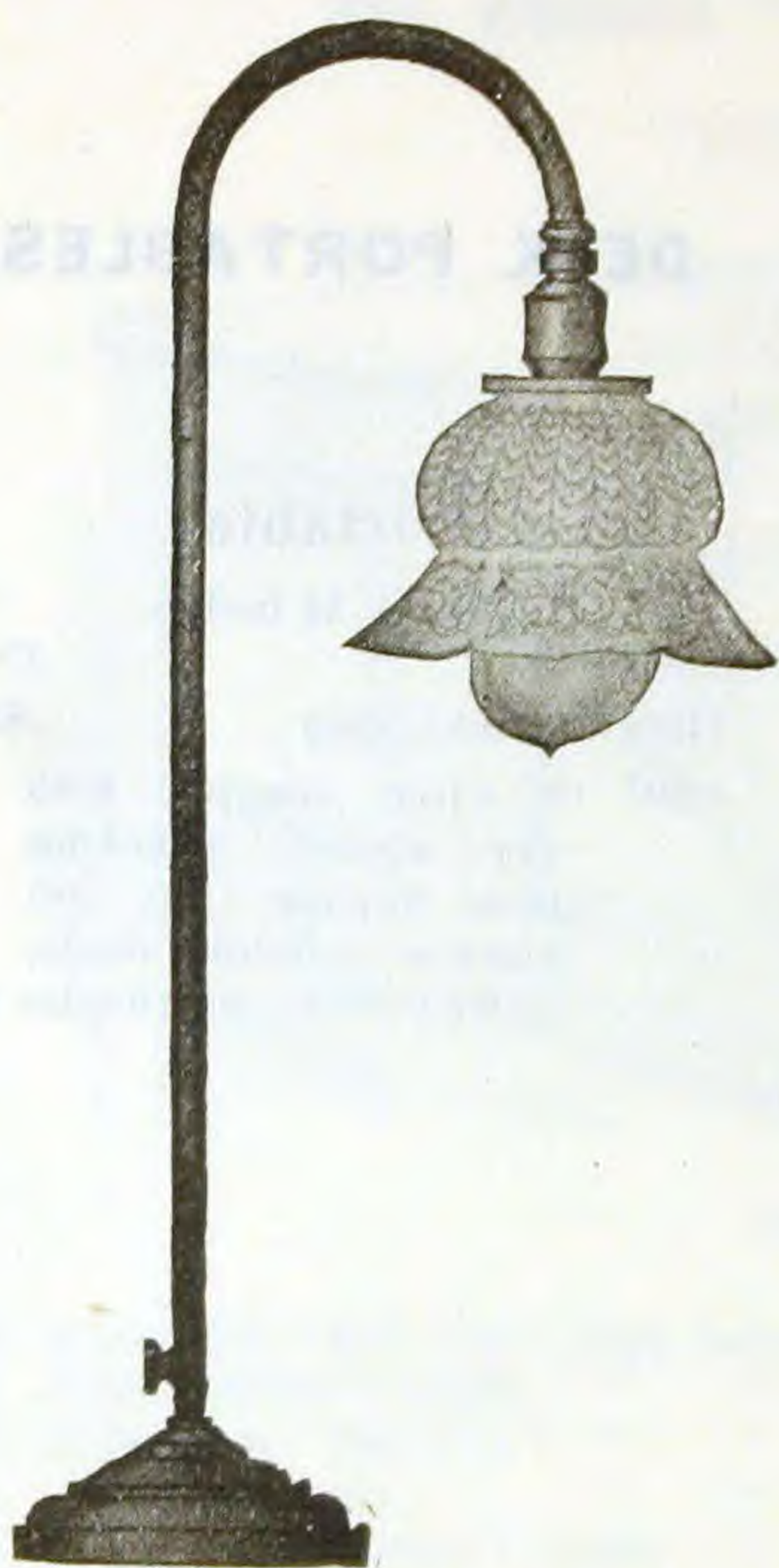


Cat. No. 11522.

### Flexible Portable.

11521	Portable only.....	3.00
11522	Or, wired complete with key socket, attaching plug, flexible cord and aluminum or glass half shade, with holder.....	5.00





Cat. No. 11524.

**DESK PORTABLES.****Plain Portable.**

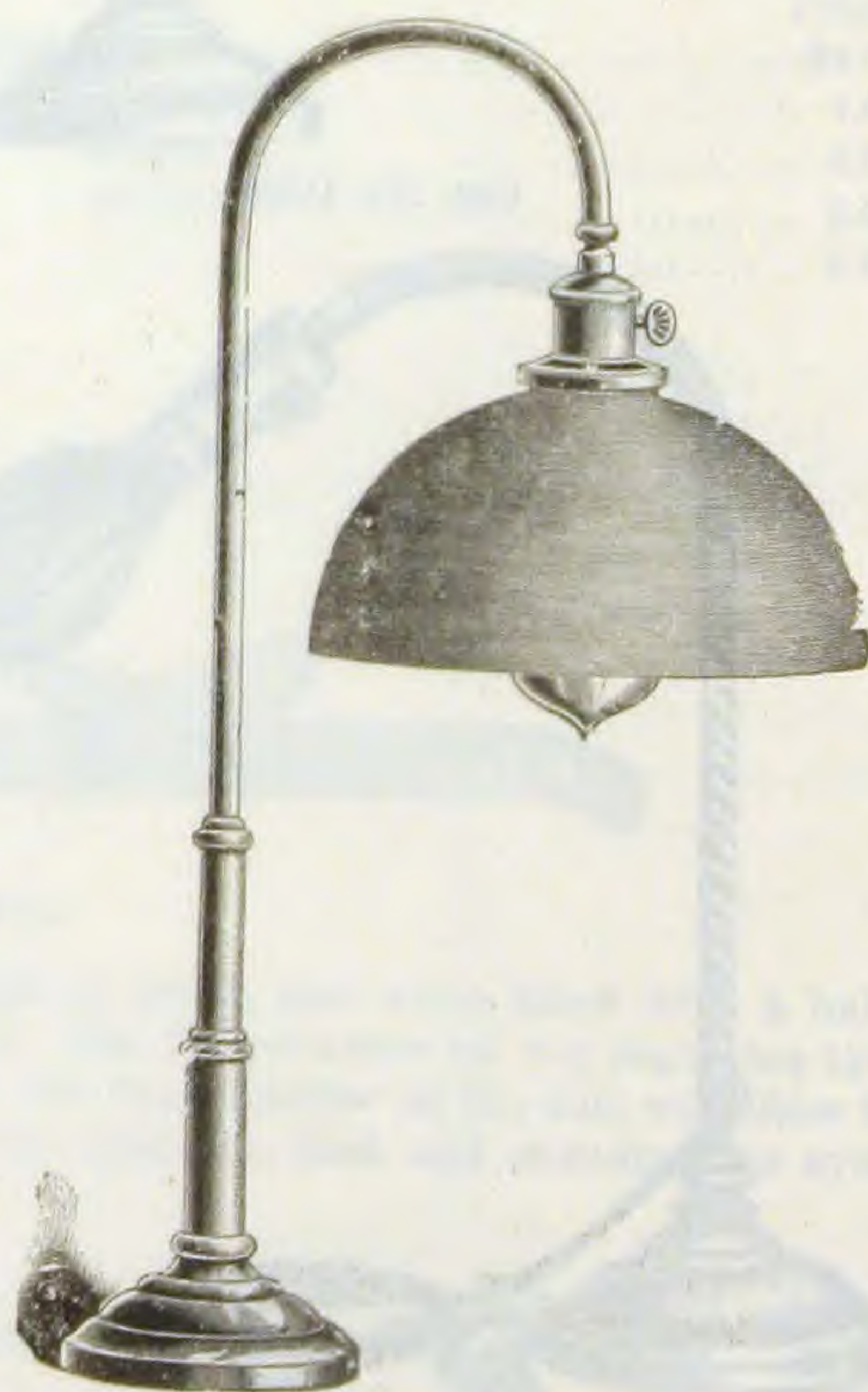
Height, 24 inches.

Cat. No.	Price.
11523 Portable only.....	\$2.00
11524 Or, wired complete with key socket, attaching plug, flexible cord, etched glass shade and holder.....	3.62

**Standard Portable.**

Height, 24 inches.

Cat. No.	Price.
11525 Portable only.....	\$3.00
11526 Or, wired complete with key socket, attaching plug, flexible cord, and opal dome or cone shade and holder.....	4.60



Cat. No. 11526.



**DESK PORTABLES.****Extension Portable.**

Height, 24 inches.

Extension, 12 inches.

The arm can be moved up and down,  
in and out, and from side  
to side.

Cat. No.	Price.
11527	Portable only.....\$4.00
11528	Or, wired complete with key socket, attaching plug, flexible cord and glass or celluloid shade, green outside, with hold- er..... 6.50



Cat. No. 11528.

**2-Light Extension  
Portable.**

Height, 24 inches.

Extension, 18 inches.

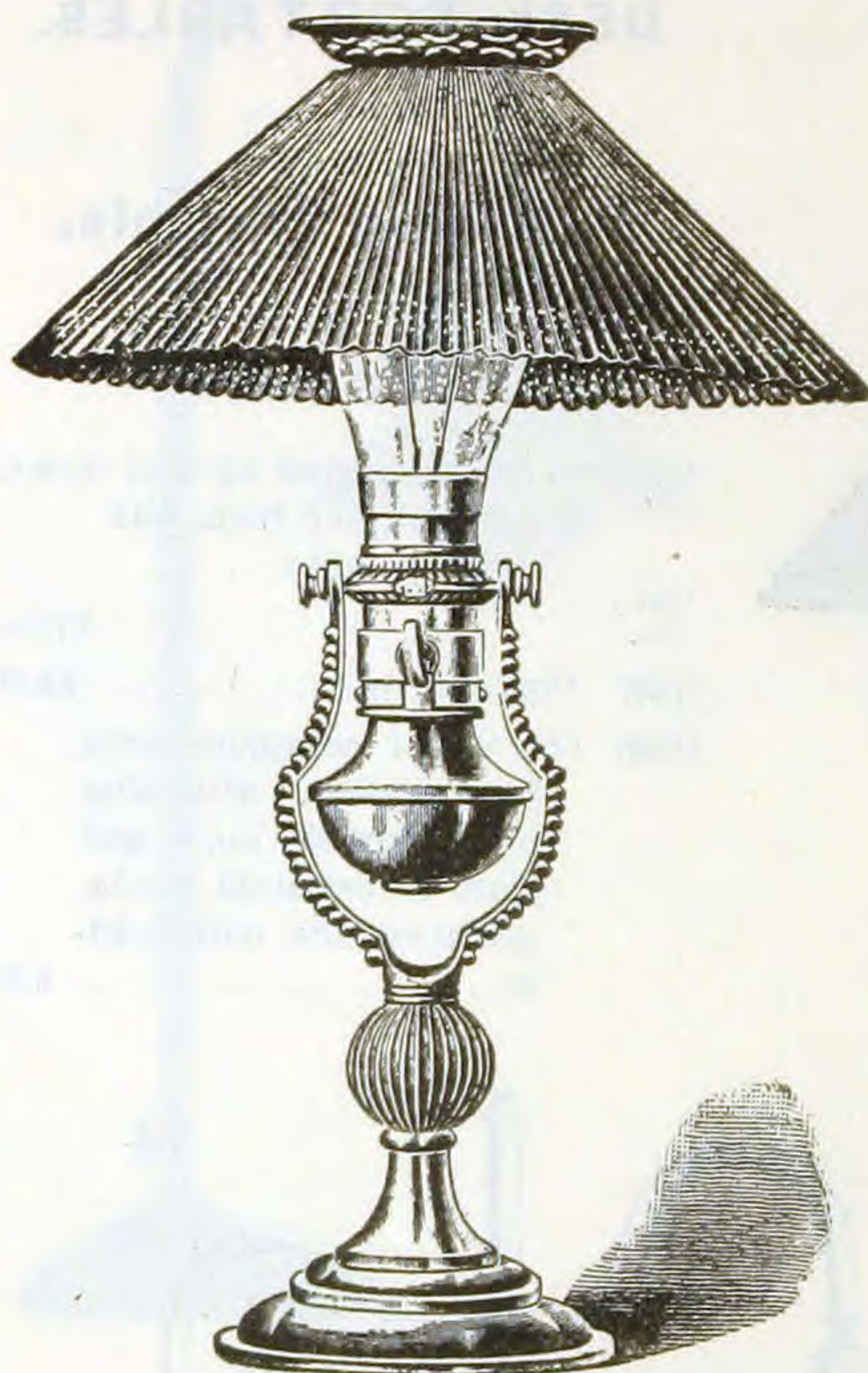
The arms can be moved up and  
down, in and out, and from  
side to side.

Cat. No.	Price.
11529	Portable only..... \$6.00
11530	Or, wired complete with key sockets, attaching plug, flex- ible cord and glass or celluloid shades, green outside, with holders..... 10.60



Cat. No. 11530.



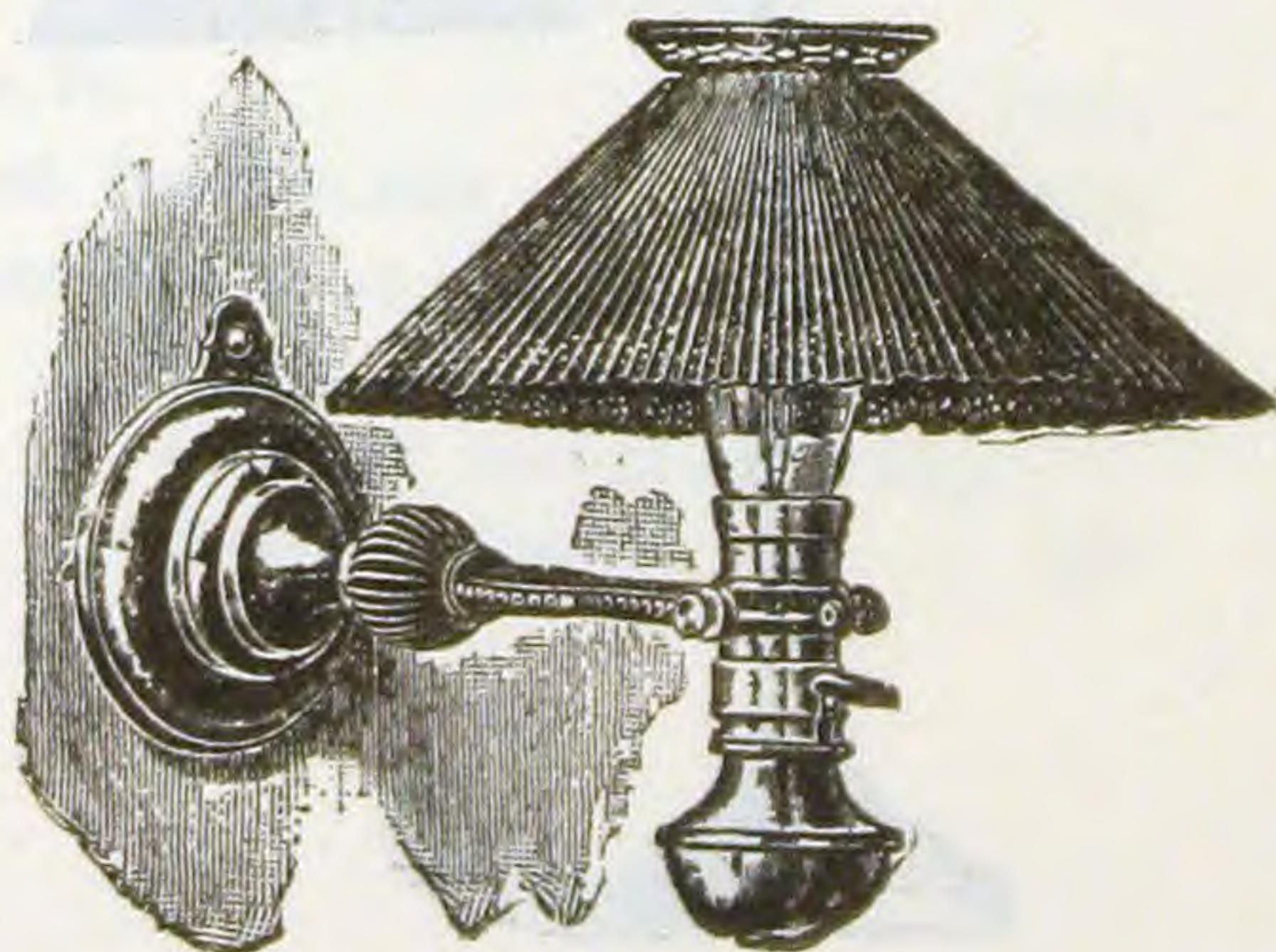


Cat. No. 11532 (as Portable)\*

### Combination Bracket and Desk Lamp.

Cat. No.	Price.
11531	Combination Bracket and Desk Lamp, with shade and holder only.....\$4.00
11532	Same, wired complete, with socket, plug and cord..... 5.00

In ordering mention style of socket in use.



Cat. No. 11532 (as Bracket),



### Bracket Tubes.

Size  $\frac{3}{8}$  inch, Brass measurement.  
Wall Plates are illustrated on page 177.



Cat. No. 11533.



Cat. No. 11537.



t. No. 11538.



Cat. No. 11539.



Cat. No. 11541.



Cat. No. 11545.



Cat. No. 11547.



Cat. No. 11548.

Cat. No.	Scale, $\frac{1}{8}$ .	Price.
11533 4 inch, per 100		\$14.00
11534 6 " " 100		18.00
11535 8 " " 100		20.00
11536 10 " " 100		23.00
Scale, $\frac{1}{8}$ .		
11537 Per 100		30.00

Scale, $\frac{1}{8}$ .		
11538 Per 100		35.00

Scale, $\frac{1}{8}$ .		
11539 6 inch, per 100		26.00
11540 10 " " 100		33.00

Scale, $\frac{1}{8}$ .		
11541 4 inch, per 100		14.00
11542 6 " " 100		16.00
11543 8 " " 100		20.00
11544 10 " " 100		23.00

Scale, $\frac{1}{8}$ .		
11545 6 inch, per 100		36.00
11546 10 " " 100		43.00

### Incandescent Street Brackets.

11547 30 in. Straight  
Pipe Bracket, each \$1.50

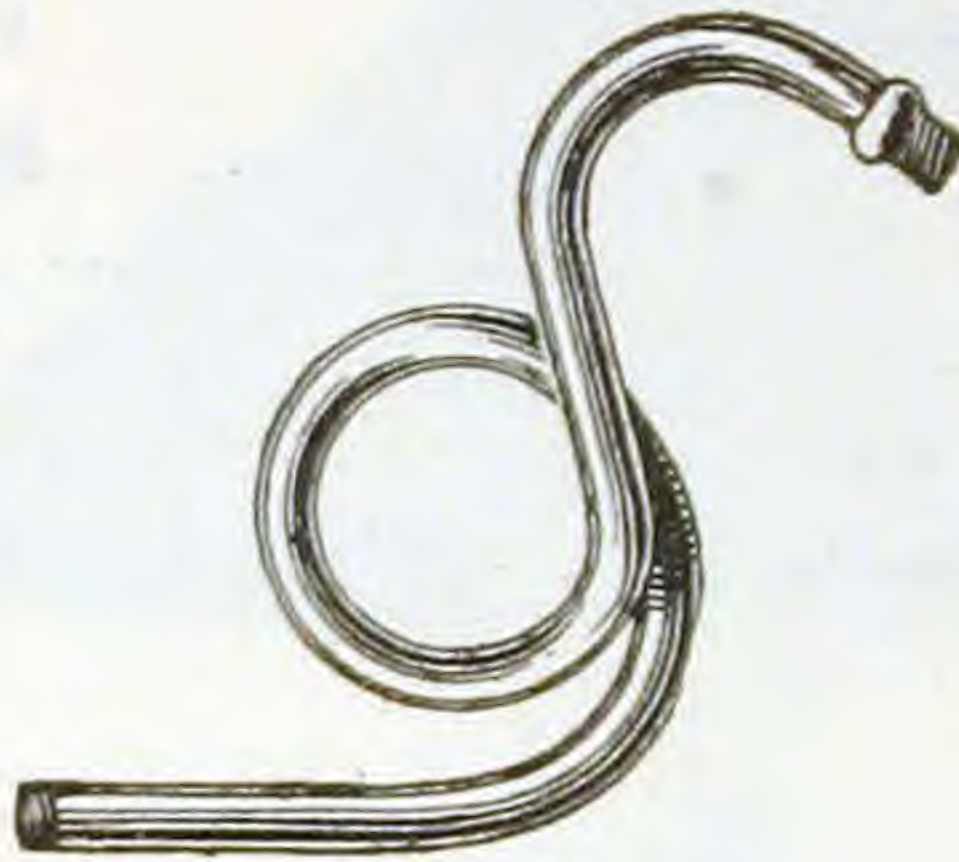
11548 Goose Neck  
Bracket, each..... 1.75

The above furnished in  $\frac{3}{8}$   
inch and  $\frac{3}{4}$  inch pipe, as  
desired.



**Bracket Tubes.**Size,  $\frac{3}{8}$  inch, Brass Measurement.

Wall Plates are illustrated on page 177.



Cat. No. 11549.

Cat. No.	Scale, $\frac{1}{8}$ .	Price.
11549 Per 100.....		\$35.00



Cat. No. 11550.

	Scale, $\frac{1}{8}$ .	
11550 Per 100....		35.00



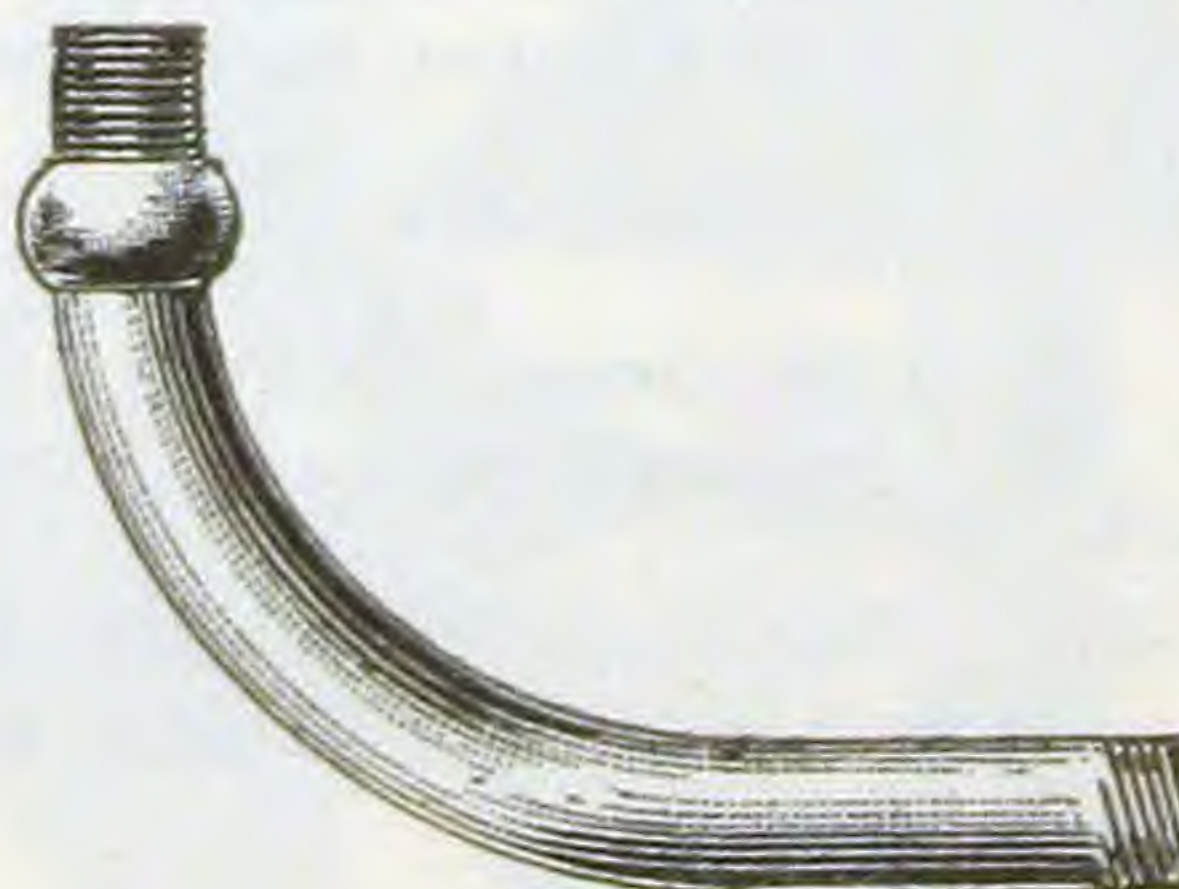
Cat. No. 11551.

	Scale, $\frac{1}{8}$ .	
11551 Per 100. ....		16.50



Cat. No. 11552.

	Scale, $\frac{1}{8}$ .	
11552 Per 100.....		10.00



Cat. No. 11553.

	Scale, $\frac{1}{8}$ .	
11553 Per 100.....		16.00



# Electric Light Side Brackets.



Cat. No. 11554.

Cat. No.	Price.
11554 6 inch .....	\$0.46
11555 10 " .....	.53



Cat. No. 11556.

11556 6 inch .....	.36
11557 10 " .....	.43



Cat. No. 11559.

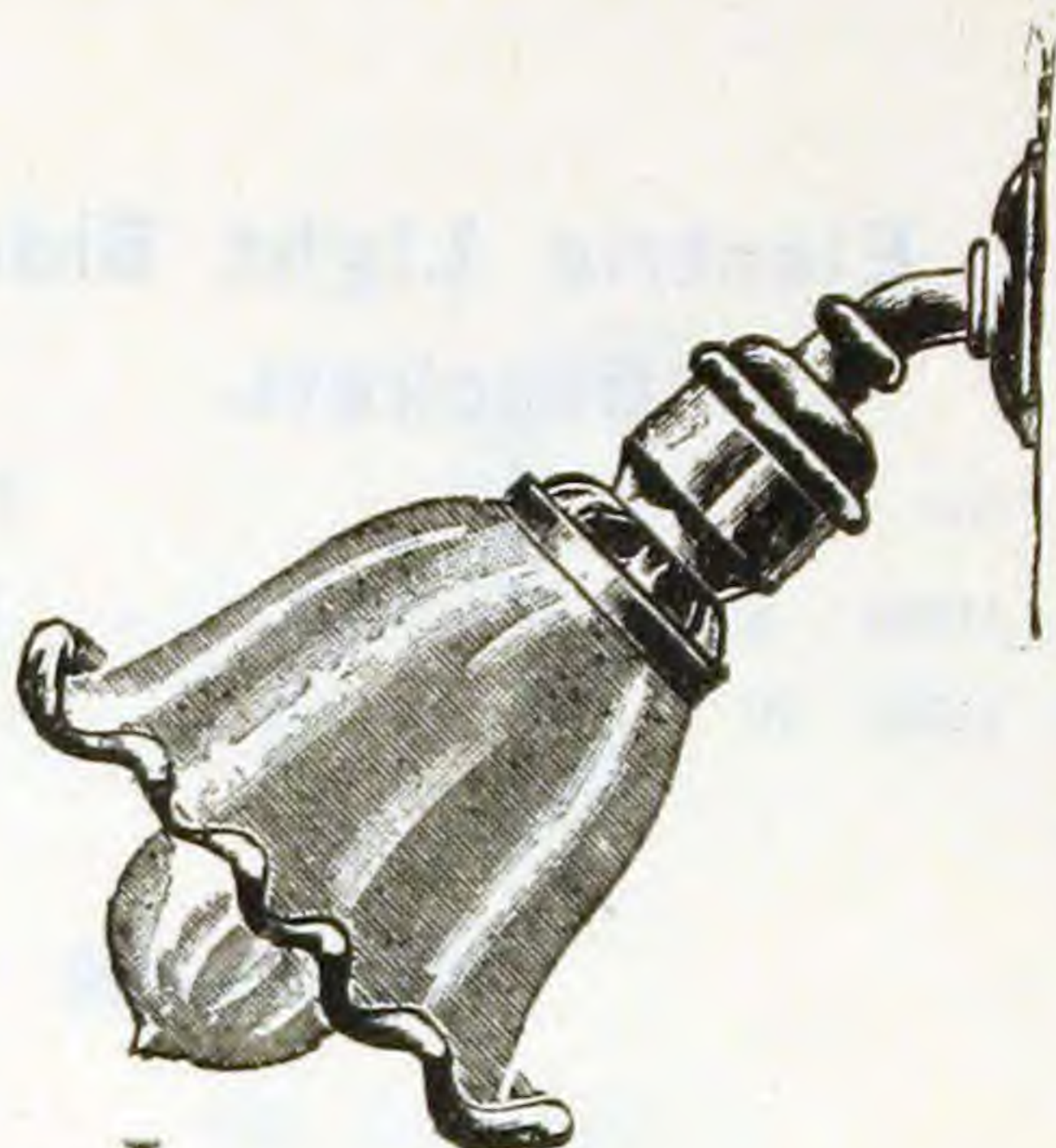
11558 6 inch .....	.26
11559 10 " .....	.33



Cat. No. 11560.

11560 Extends 6 inches .....	.20
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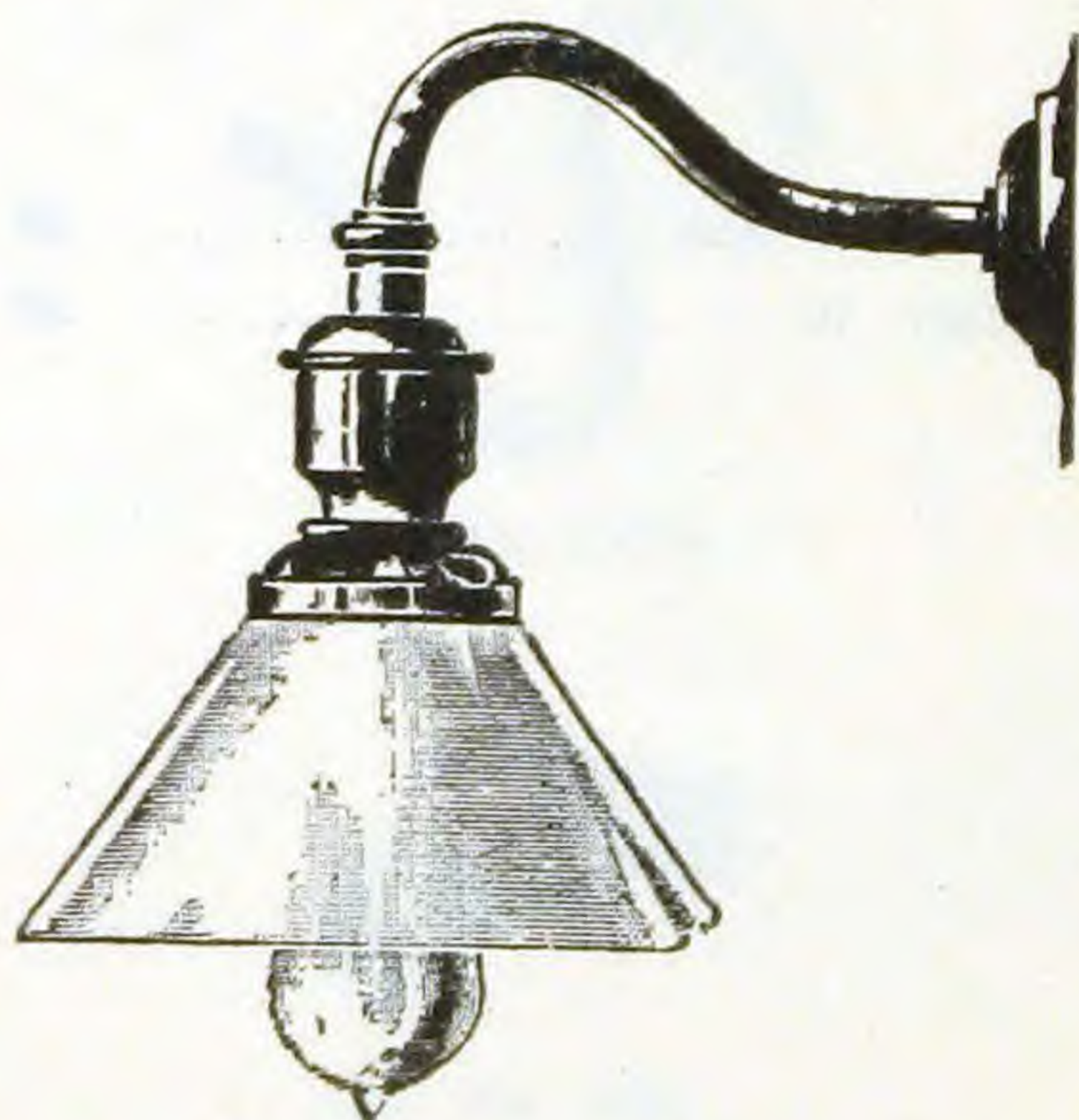




Cat. No. 11561.

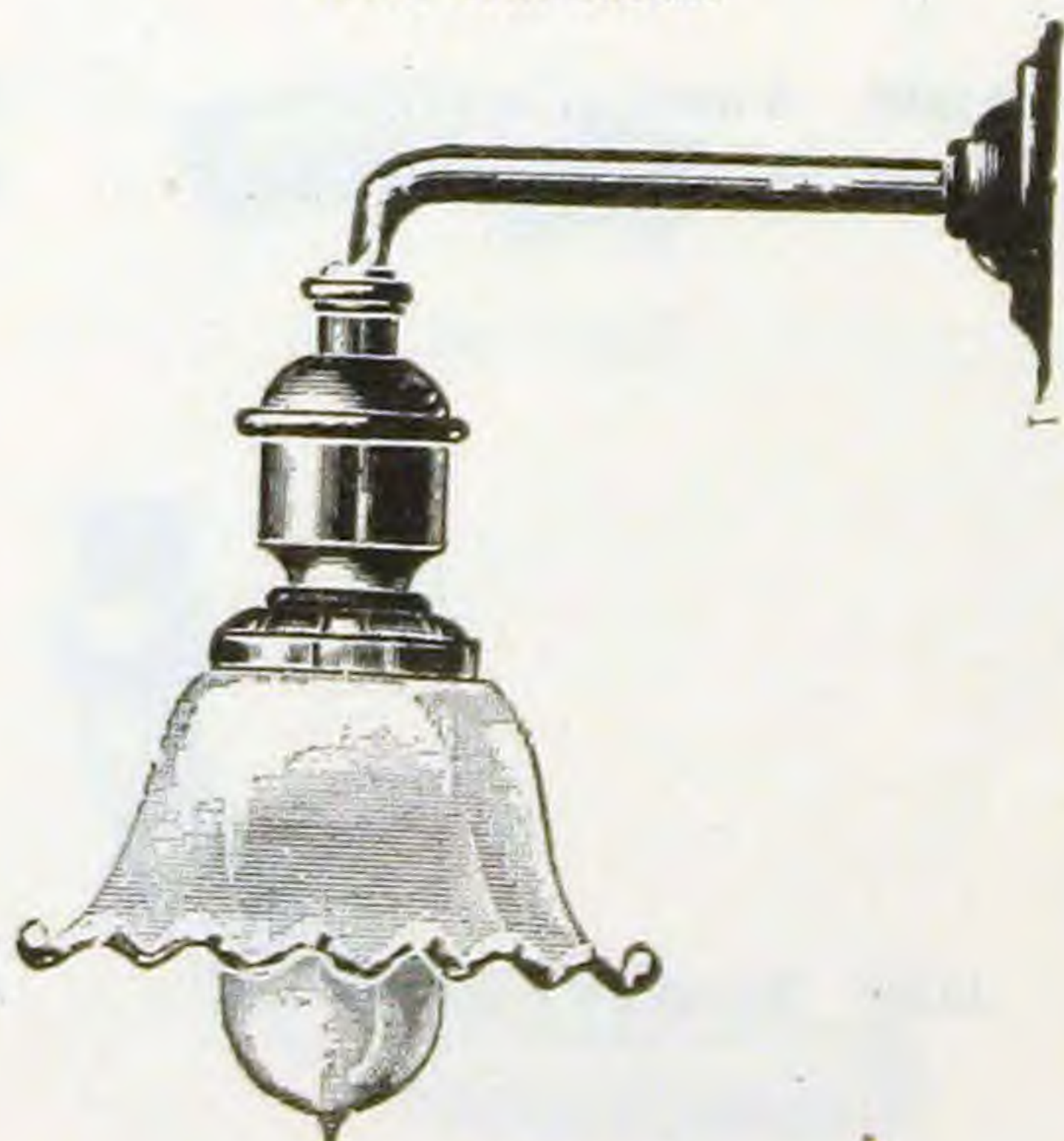
### Electric Light Side Brackets.

Cut. No.	Price.
11561 3 inch.. .. .	\$0.20



Cat. No. 11562.

11562 6 inch.. .. .	.26
11562½ 10 " .. .. .	.33



Cat. No. 11563.

11563 6 inch.. .. .	.26
11564 10 " .. .. .	.33





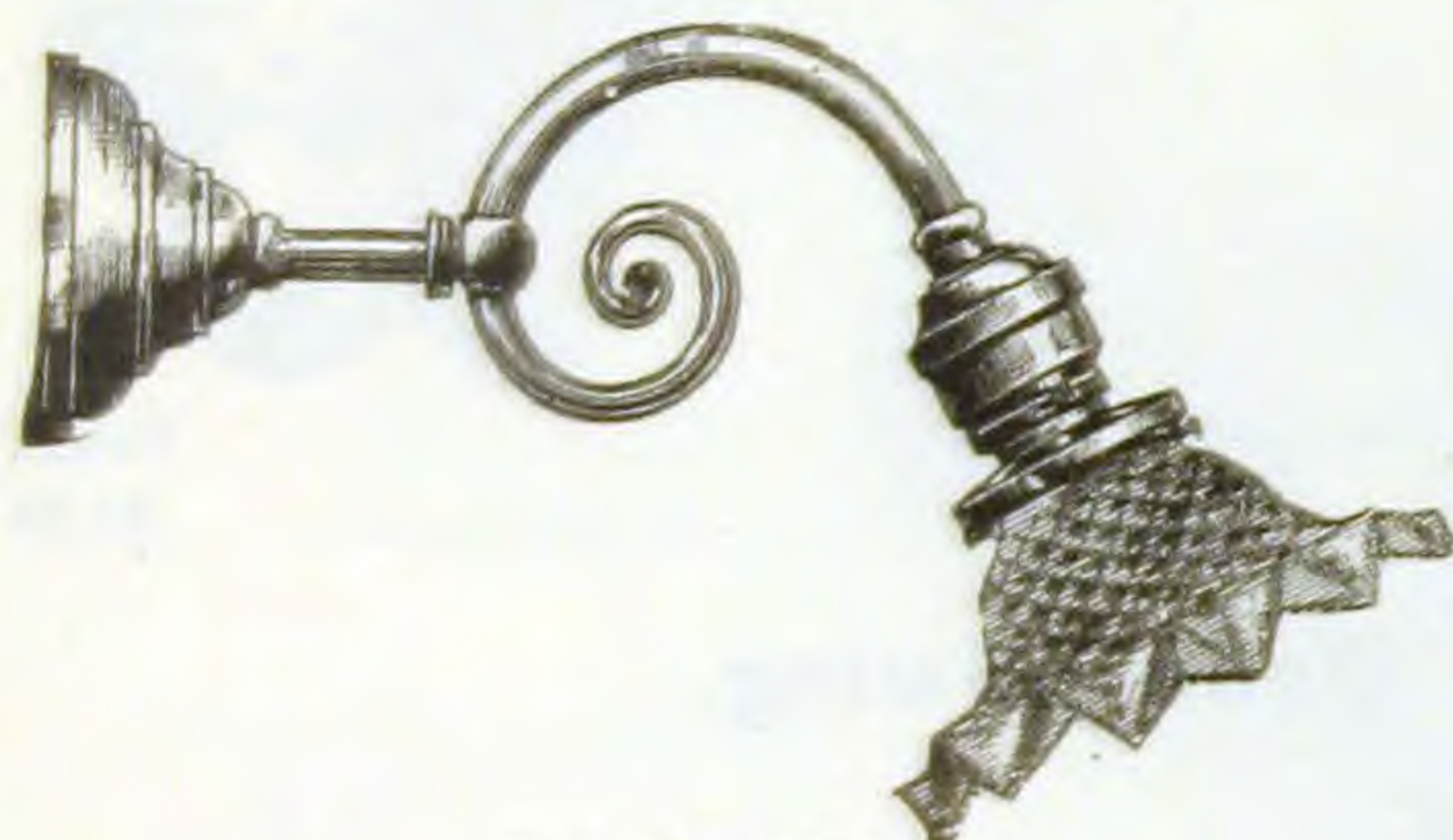
Cat. No. 11564½.

## ELECTRIC LIGHT SIDE BRACKETS.

### Electric Bracket, 1-Light.

½-inch Tube.

Cat. No.	Price.
11564½ With Canopy and Crowfoot.....	\$2.00



Cat. No. 11565.

### Electric Bracket, 1-Light.

¾-inch Tube.

Cat No.	Price.
11565 With Canopy and Crowfoot.....	\$1.25



Cat. No. 11566.

### Electric Bracket, 2-Light.

¾-inch Tube.

Cat. No.	Price
11566 With Canopy and Crowfoot.....	\$1.75



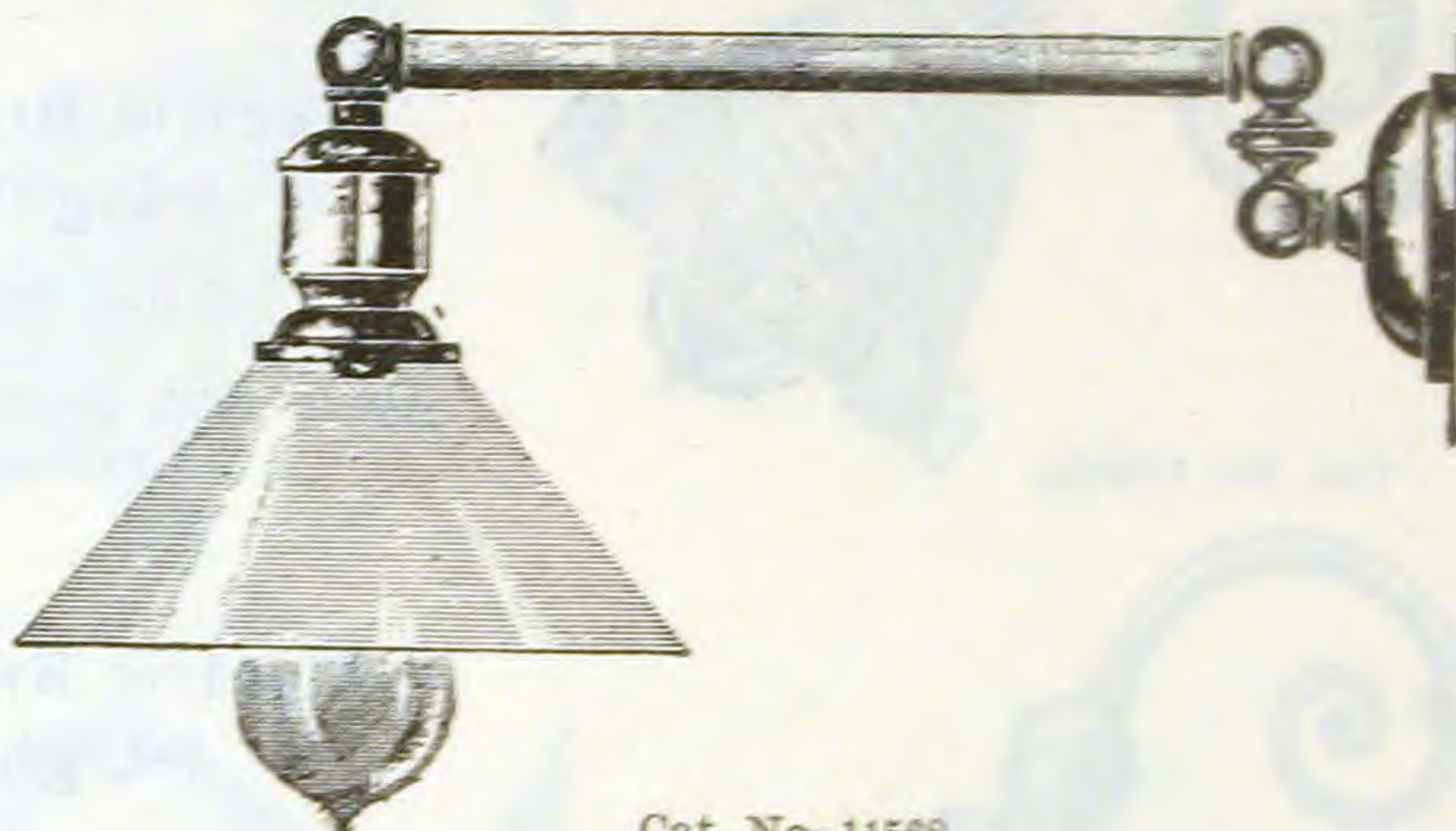
Cat. No. 11567.

### Electric Bracket, 2-Light.

½-inch Tube.

Cat. No.	Price.
11567 With Canopy and Crowfoot.....	\$3.00



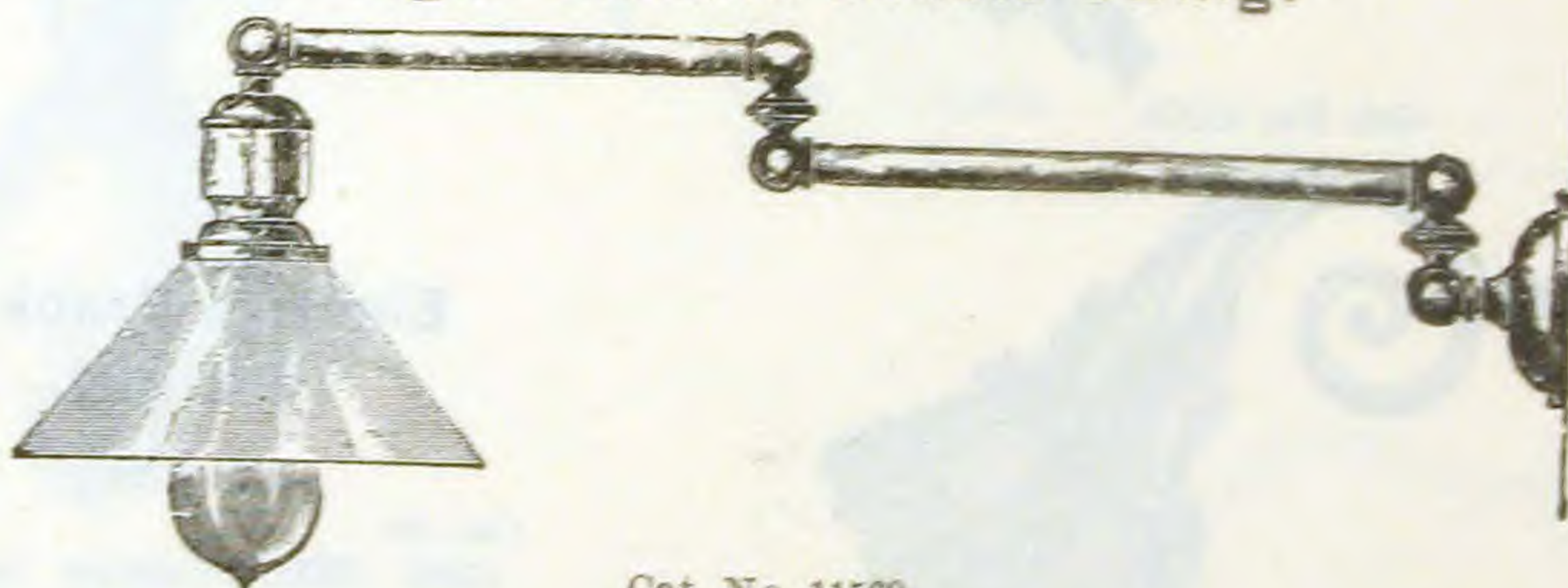
**ELECTRIC LIGHT SIDE BRACKETS.****1-Light Electric Single Swing.**

Cat. No.

Cat. No. 11568.

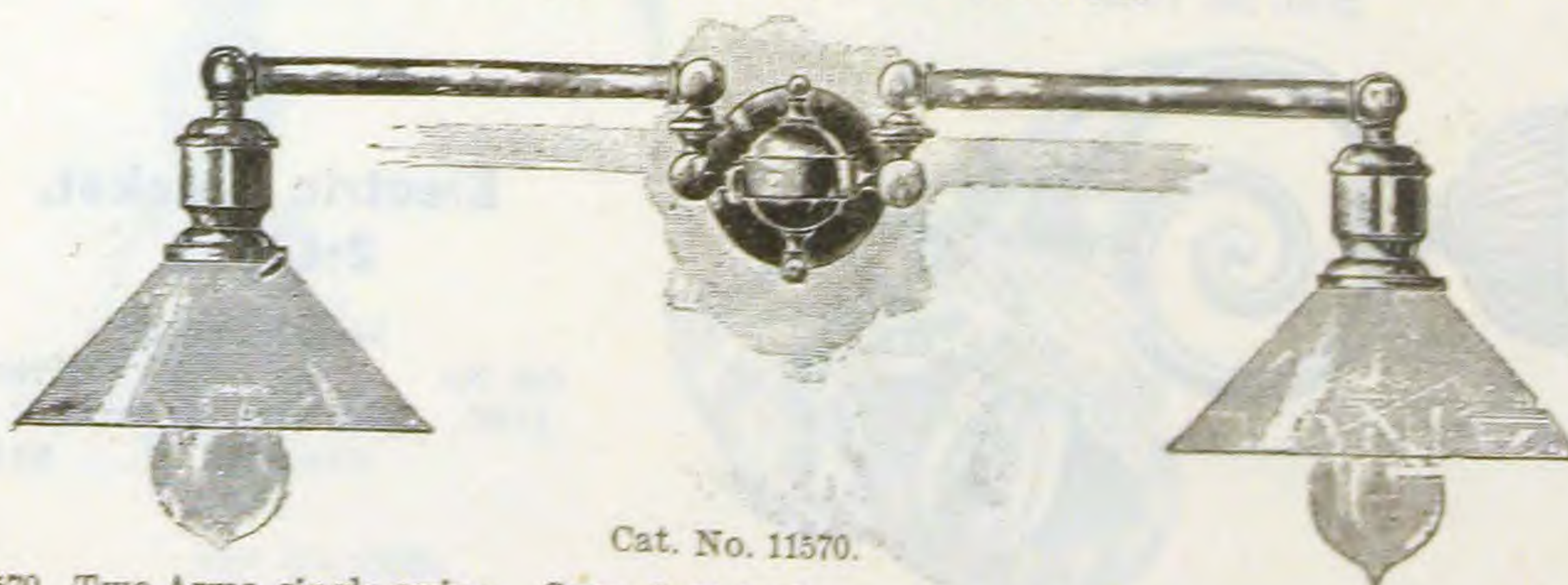
Price.

11568 Bracket. Spread, 12 inches.....\$1.50

**1-Light Electric Double Swing.**

Cat. No. 11569.

11569 Bracket. Spread, 24 inches..... 3.00

**2-Light Electric Bracket.**

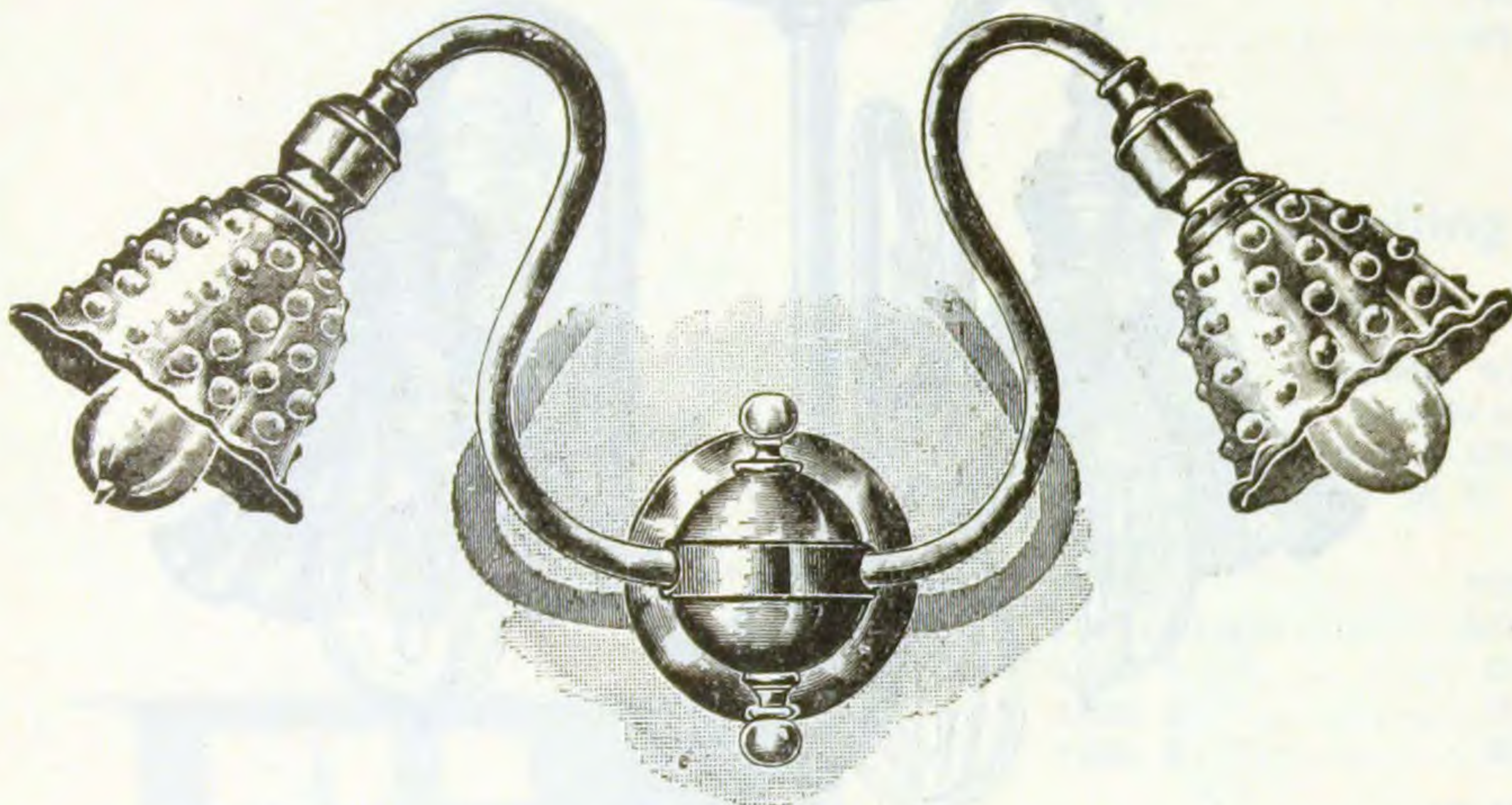
Cat. No. 11570.

11570 Two Arms, single swing. Spread, 24 inches. .... 5.50



## 2-LIGHT BRACKETS.

### 2-Light Electric Bracket.



Cat. No. 11571.

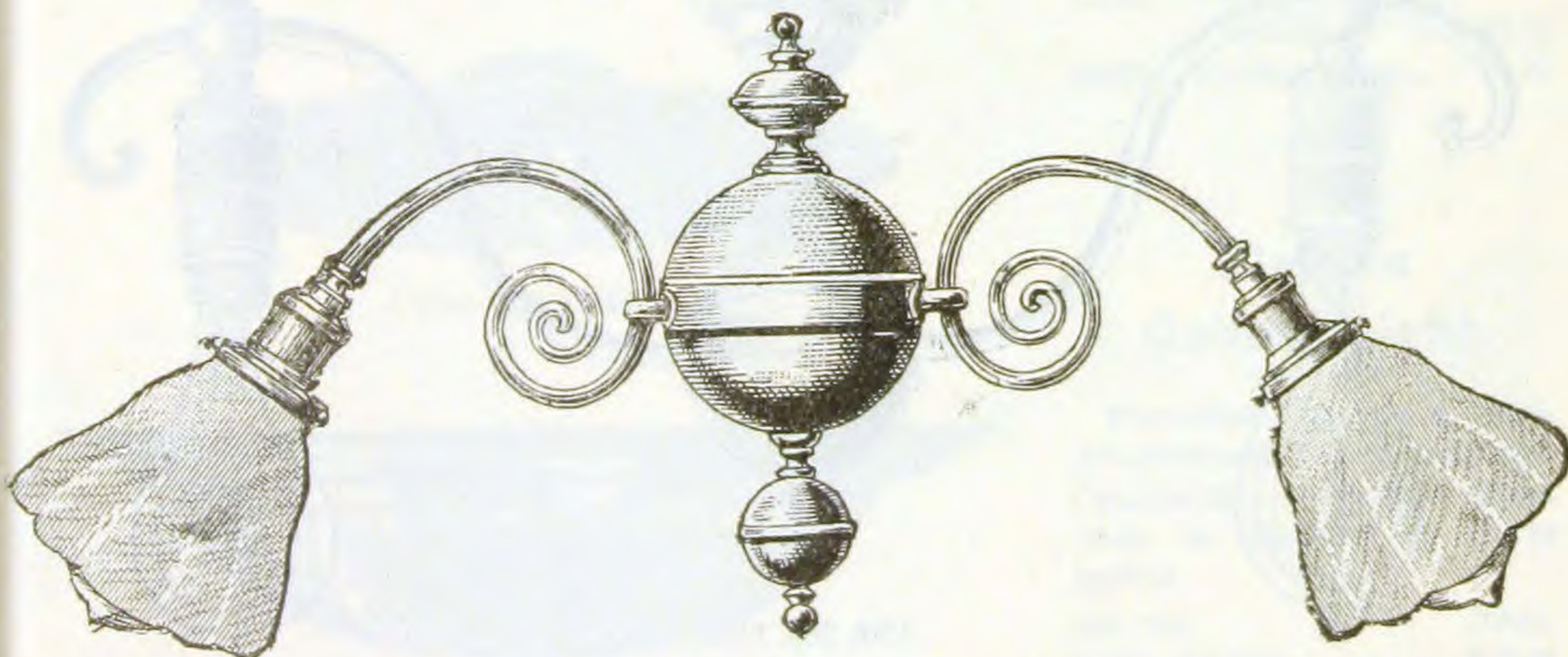
Cat. No.

11571 With Canopy and Crowfoot.....

Price.

\$3.00

### 2-Light Electric Bracket.



Cat. No. 11572.

Cat. No.

11572 With Canopy and Crowfoot.....

Price.

\$4.00



**CEILING LIGHTS AND CAR FIXTURES.****Electric Ceiling Light and Car Fixture.**

Cat. No.

Cat. No. 11573.

Price.

11573	3-Light ..	.....	\$3.50
11574	4-Light ..	.....	4.00
11576	5-Light ..	.....	4.50

**Electric Ceiling Light and Car Fixture.**

Cat. No. 11577.

11577	2-Light ..	.....	4.00
11578	3-Light ..	.....	4.75
11579	4-Light ..	.....	5.50



**ELECTRIC LIGHT CEILING FIXTURES.**

Cat. No. 11580.

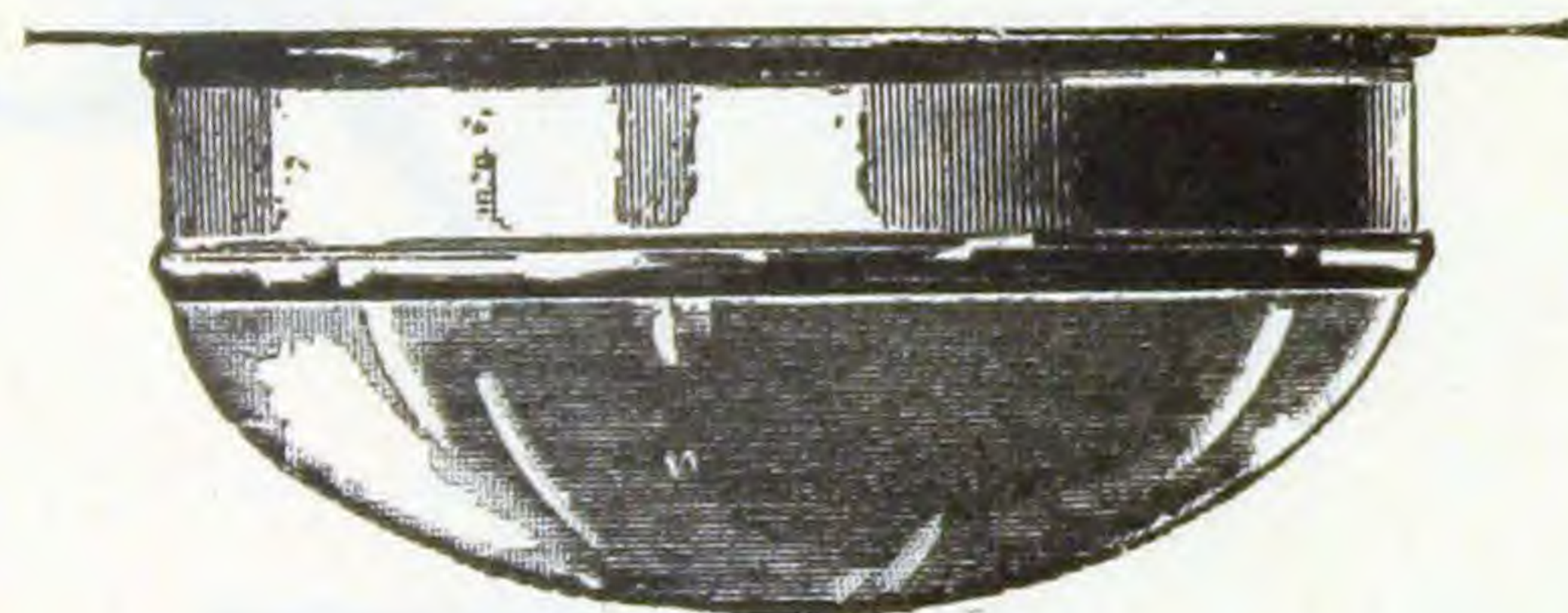
**Ceiling Light.**

Cat. No.	Price.
11580 . . . . .	\$0.15

**Electric Ceiling Light.**

Furnished complete with Attachments for Sockets and Opalescent or Ground Glass Dish, in diameter 10 to 14 inches.

Cat. No.	Price.
11581 1-Light . . . . .	\$10.00
11582 2 " . . . . .	11.00
11583 3 " . . . . .	14.50
11584 6 " . . . . .	22.00



Cat. No. 11581.

**3-Light Car Cluster.**

Cat. No.	Price.
11585 3-Light Cluster, complete . . . . .	\$2.50
11586 Rubber Ring . . . . .	.20

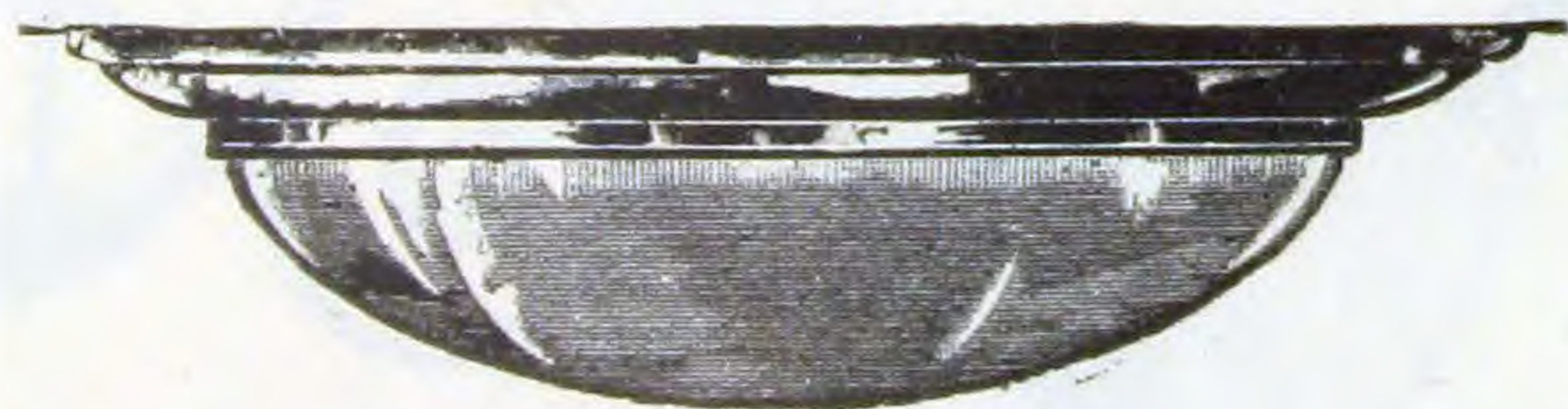


Cat. No. 11585.

**Electric Ceiling Light.**

Furnished complete with Attachments for Sockets and Opalescent or Ground Glass Dish, in diameter 10 to 14 inches.

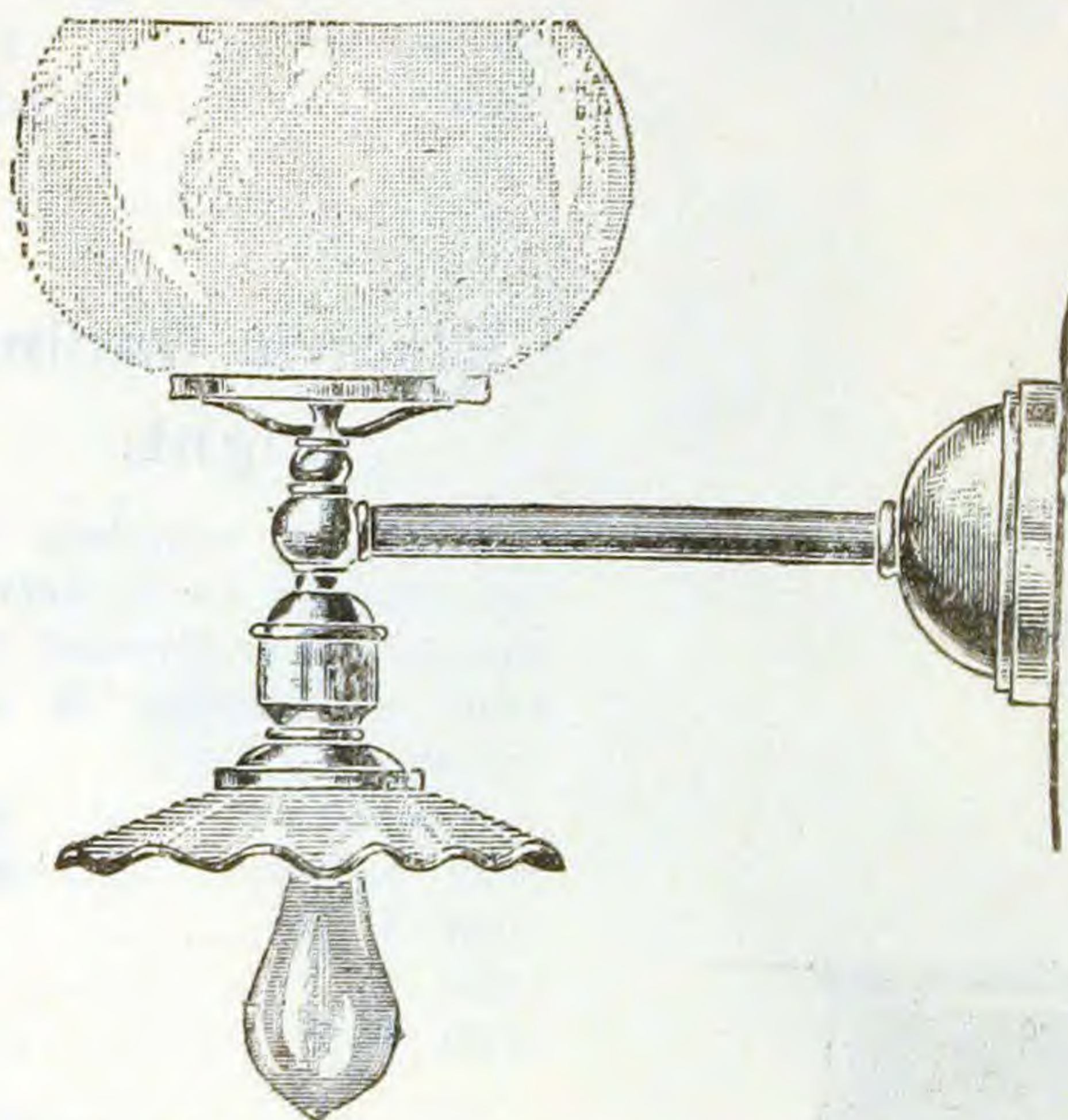
Cat. No.	Price.
11587 1-Light . . . . .	\$10.00
11588 2 " . . . . .	11.00
11589 3 " . . . . .	14.50
11590 6 " . . . . .	22.00



Cat. No. 11587.



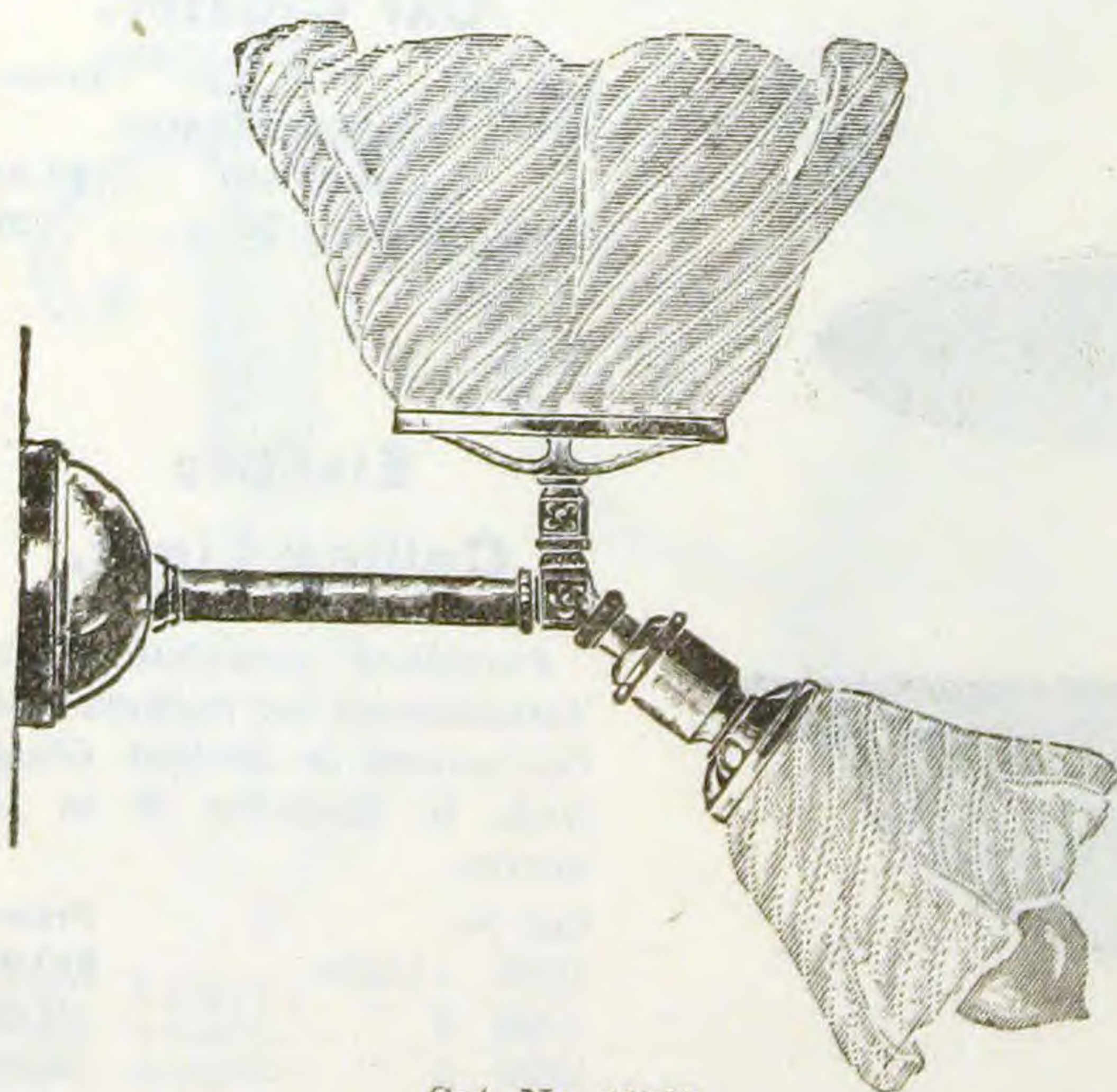
## Combination Electric Light and Gas Side Brackets.



1 GAS. 1 ELECTRIC.

Cat. No.	Price.
11591 Extends 6 in., wired...	\$2.00

Cat. No. 11591.



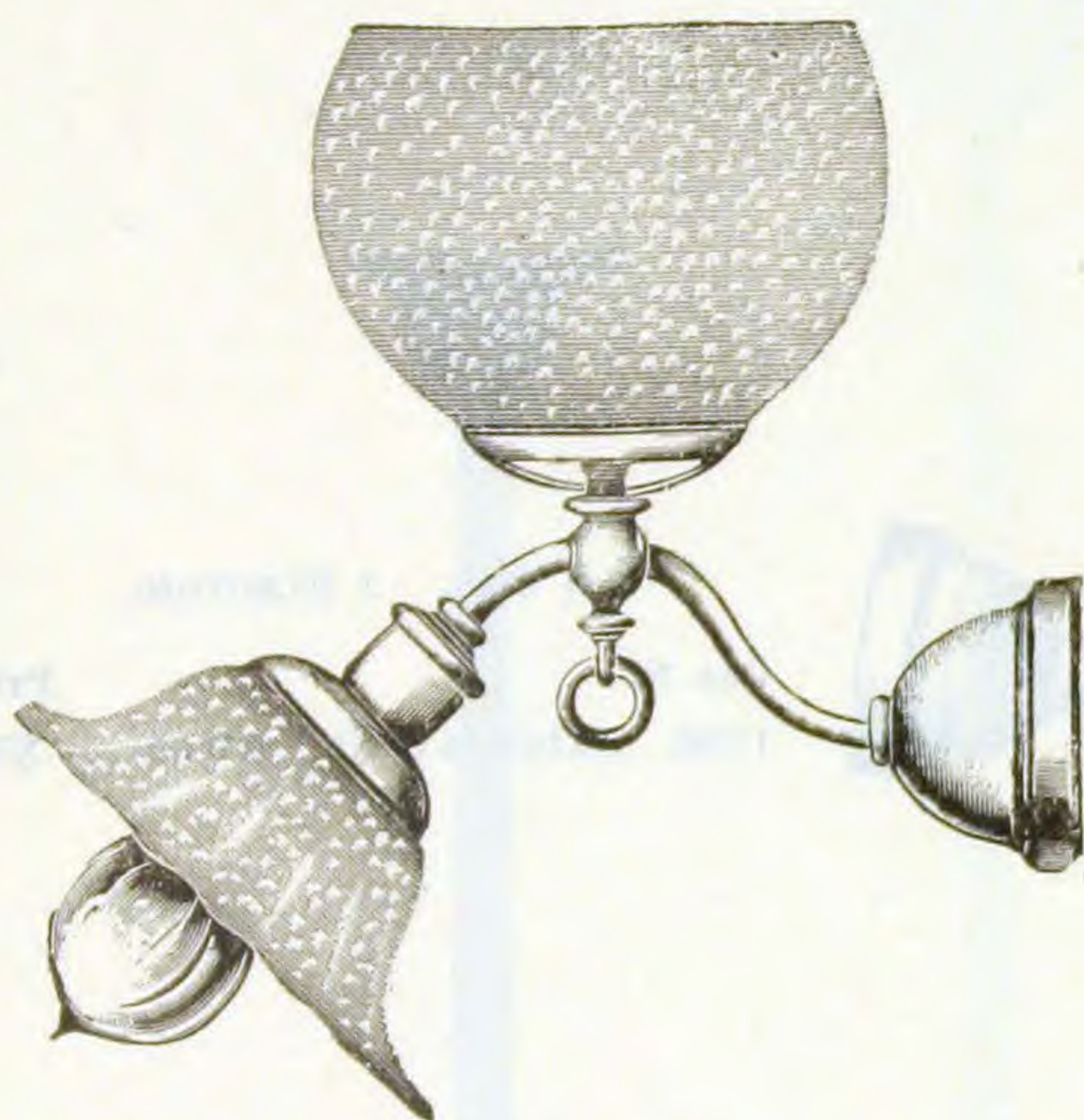
1 GAS. 1 ELECTRIC.

11592 Spread, gas 6 in, elec-	
tric 12 in., wired.....	2.00

Cat. No. 11592.



Combination Electric Light and Gas Side Brackets.



Cat. No. 11593.

1 GAS. 1 ELECTRIC.

Cat. No.	Price.
11593 Wired.....	\$2.50



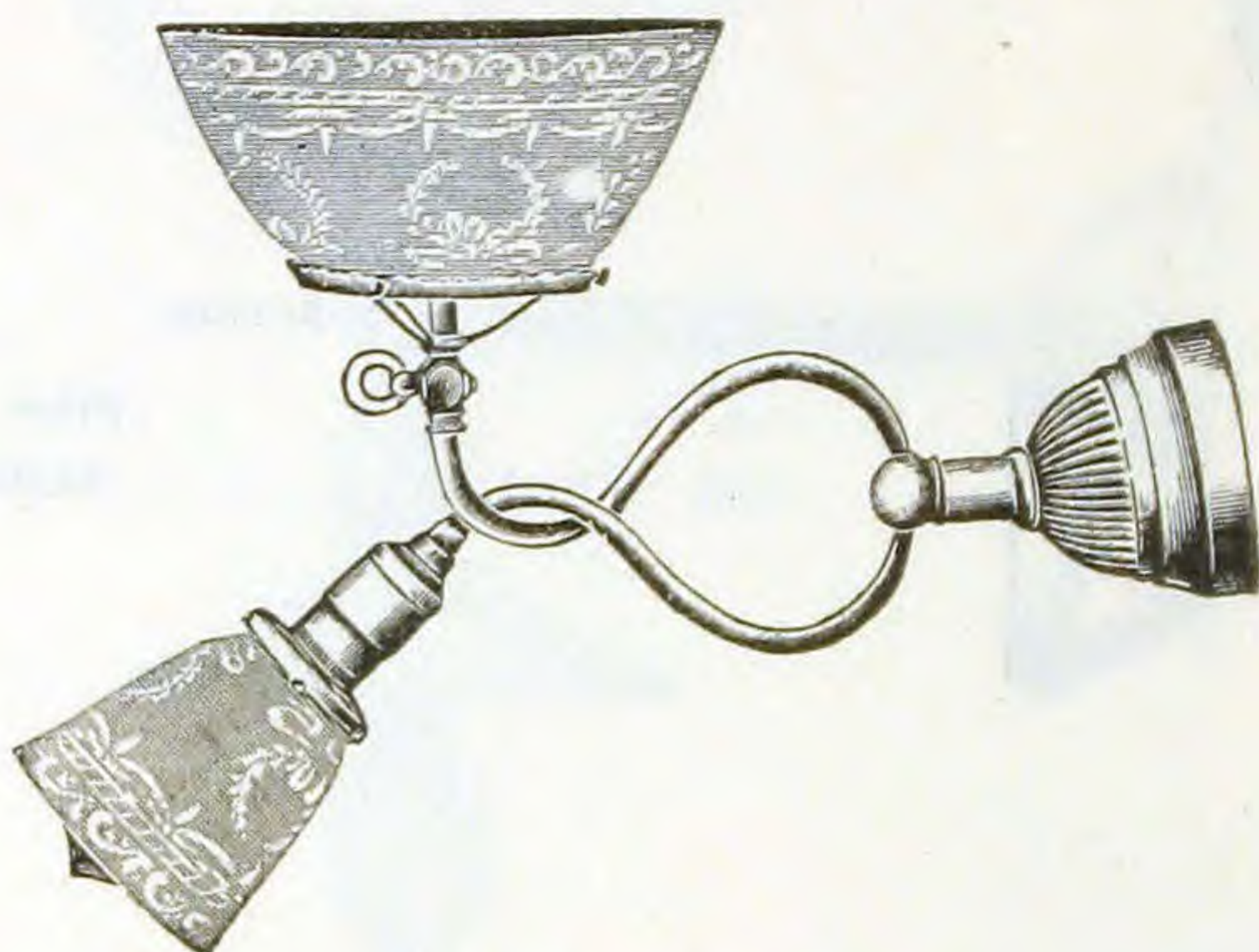
Cat. No. 11594.

1 GAS. 1 ELECTRIC.

11594 Wired.....	3.25
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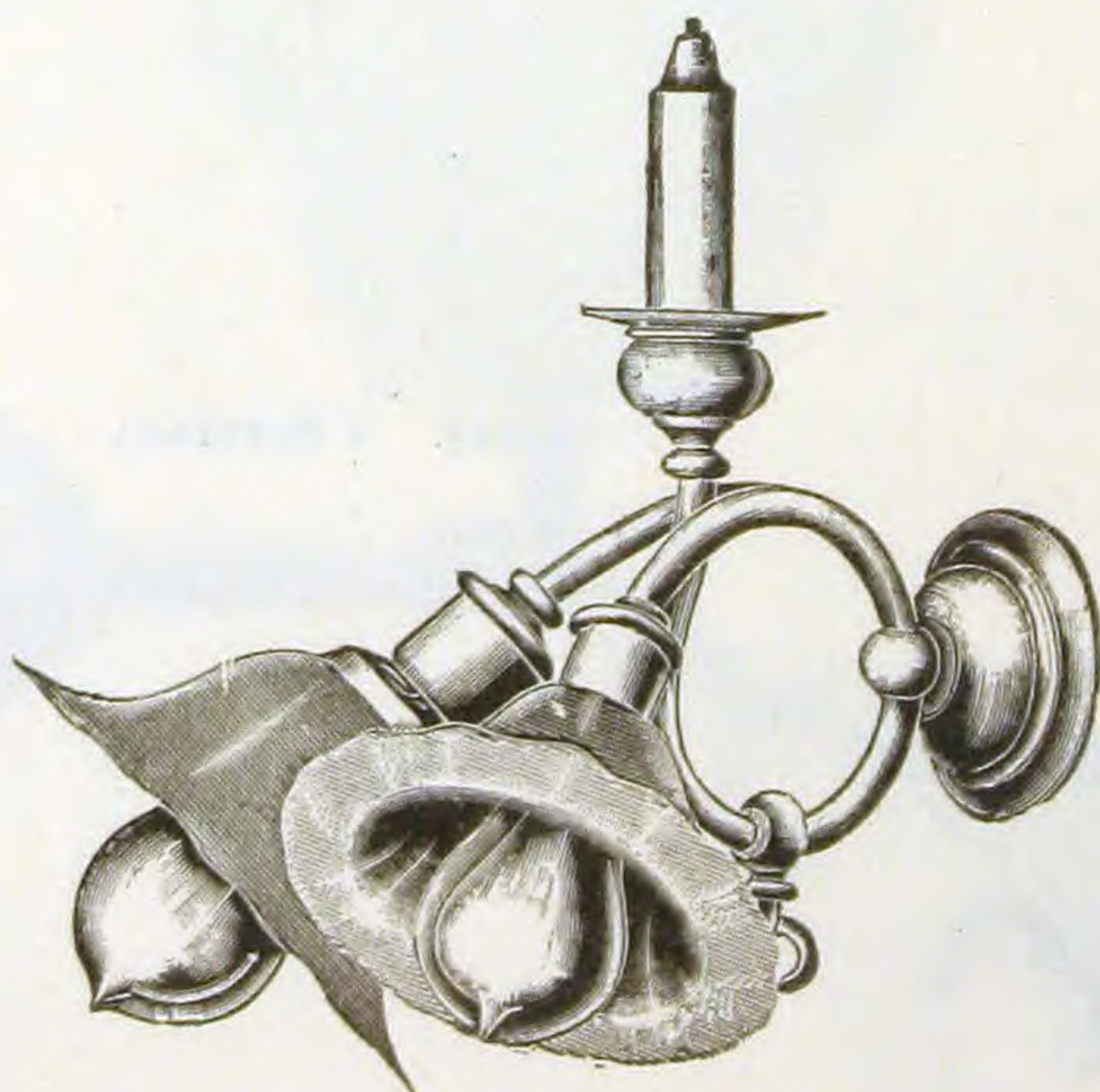
## Combination Electric Light and Gas Side Brackets.



Cat. No. 11595.

1 GAS. 1 ELECTRIC.

Cat. No.	Price.
11595 Extends 16 in., wired.....	\$3.00



Cat. No. 11596.

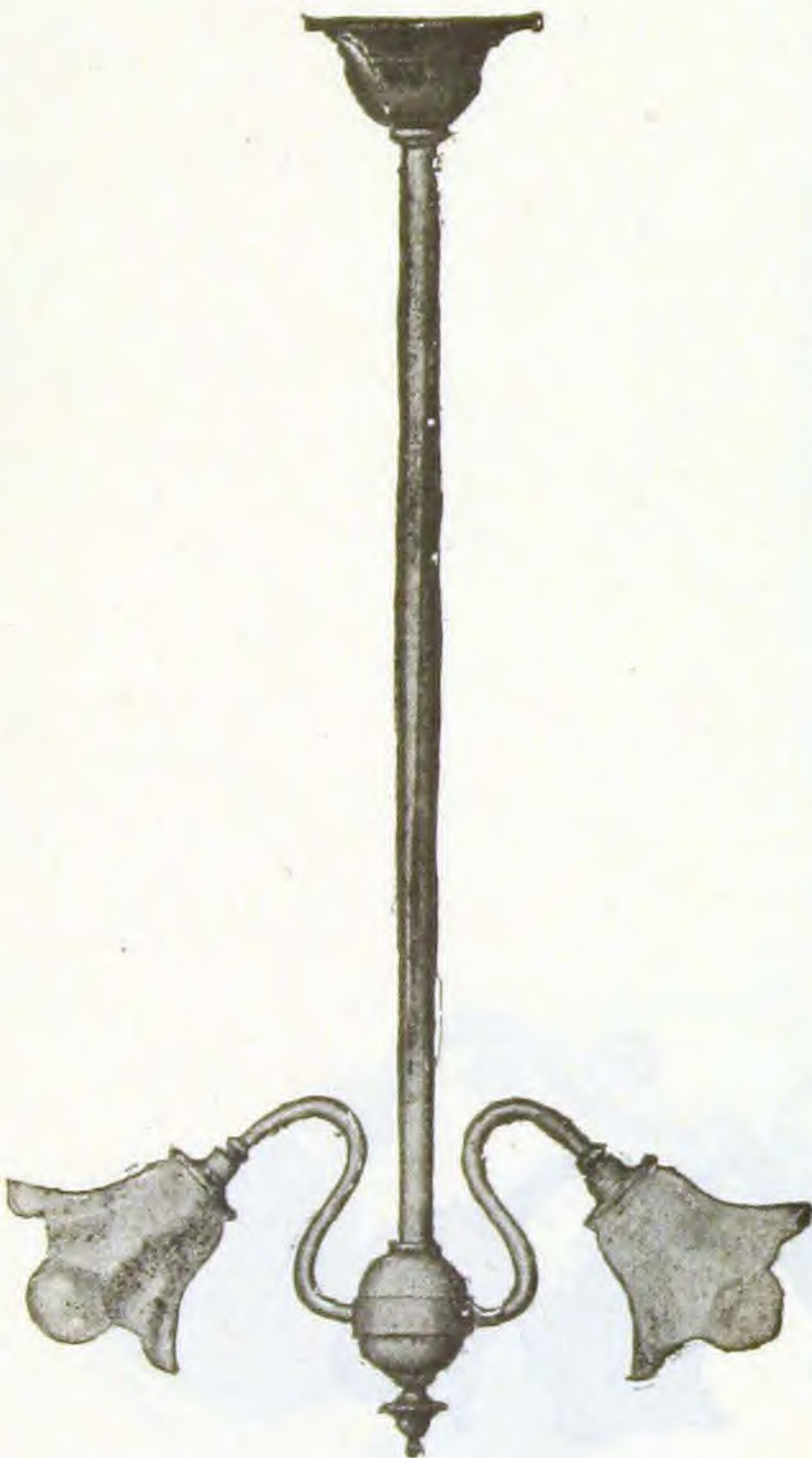
1 GAS. 2 ELECTRIC.

11596 Wired.....	4.00
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Cat.  
115  
115  
115

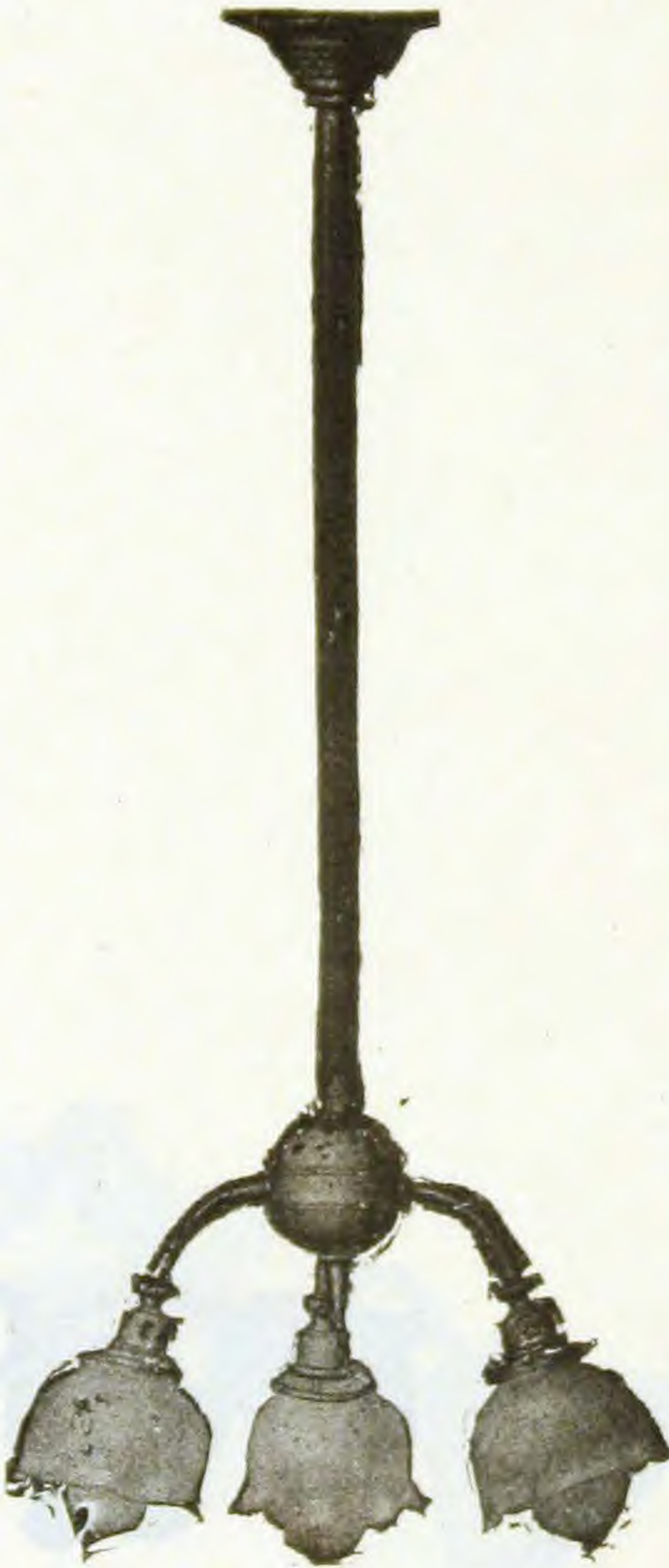


Electric Light Fixtures.



Cat. No. 11597.

Length, 34 inches. Spread, 16 inches.



Cat. No. 11601.

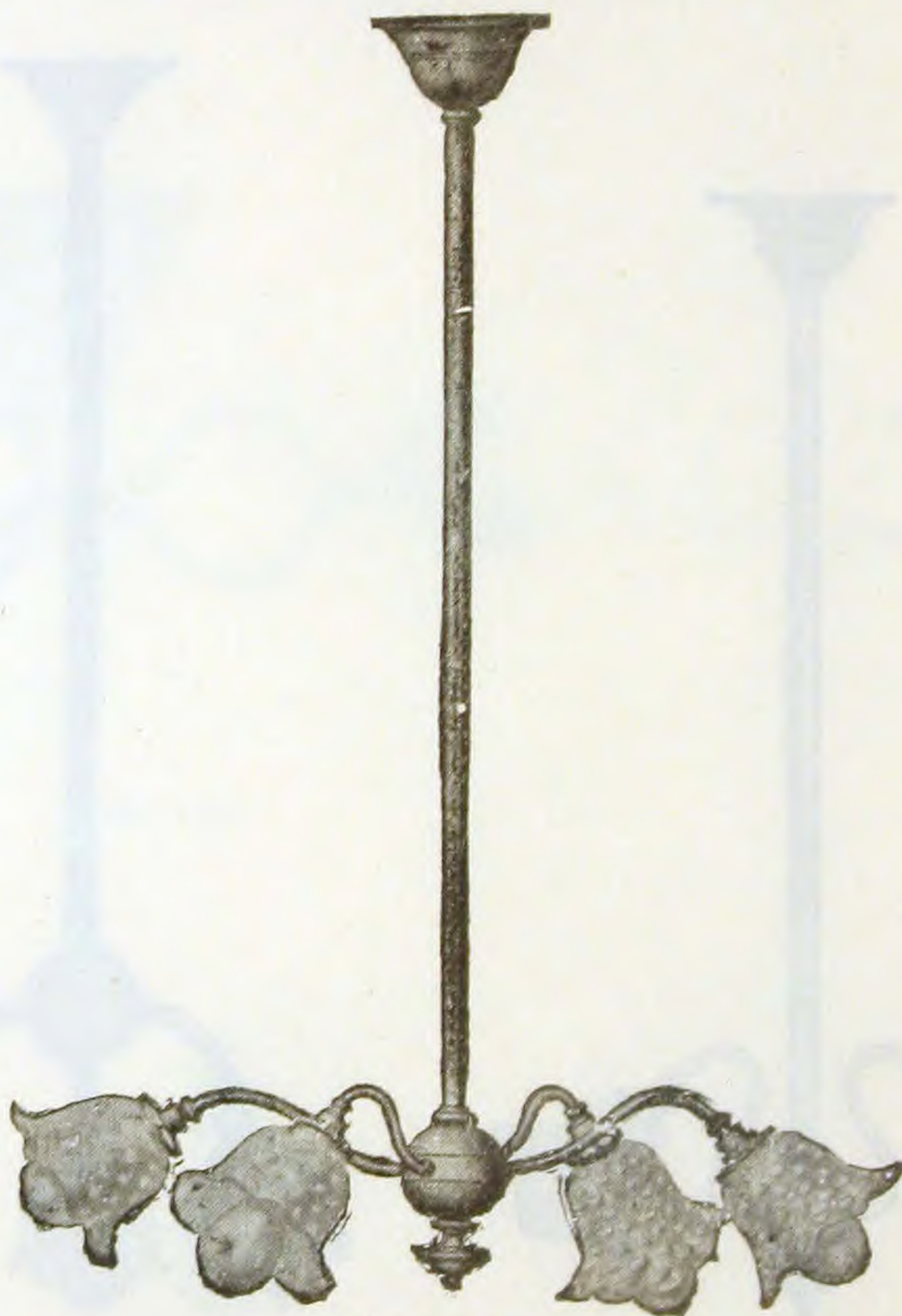
Length, 34 inches. Spread, 10 inches.

Cat. No.	Price.
11597 2-Light, Electric.....	\$3.00
11598 3 " " .....	3.50
11599 4 " " .....	4.00

Cat. No.	Price.
11600 2-Light, Electric.....	\$3.00
11601 3 " " .....	3.50
11602 4 " " .....	4.00



## Electric Light Fixtures.



Cat. No. 11605.

Length, 34 inches. Spread, 20 inches.

Cat. No.			Price.
11603	2-Light, Electric.	.....	\$3.00
11604	3 " "	.....	3.50
11605	4 " "	.....	4.00



## Electric Light Fixtures.



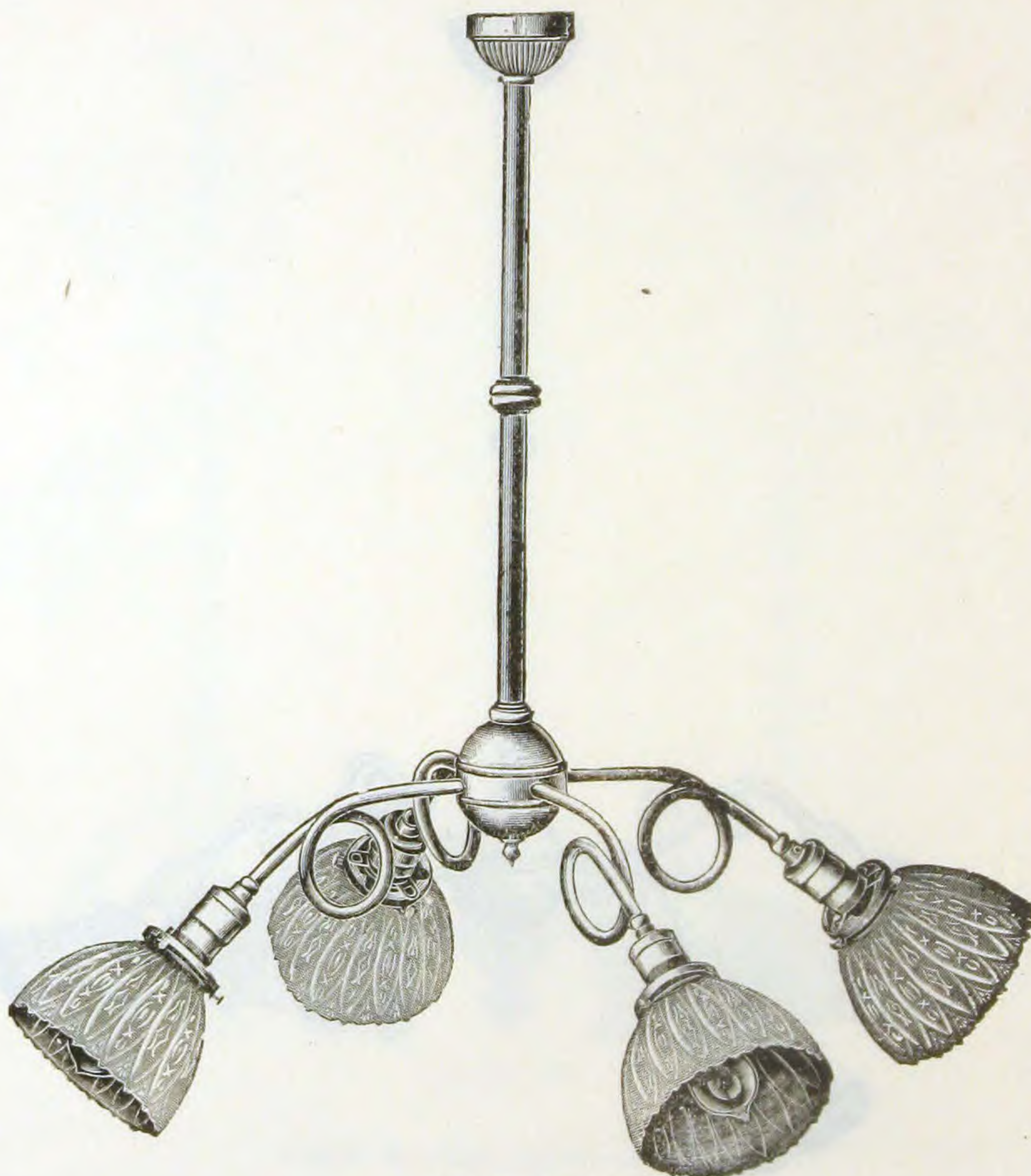
Cat. No. 11608.

Length, 40 inches. Spread, 24 inches.

Cat. No.		Price.
11606	2-Light, Electric.....	\$3.50
11607	3 " " .....	4.00
11608	4 " " .....	4.50



## Electric Light Fixtures.



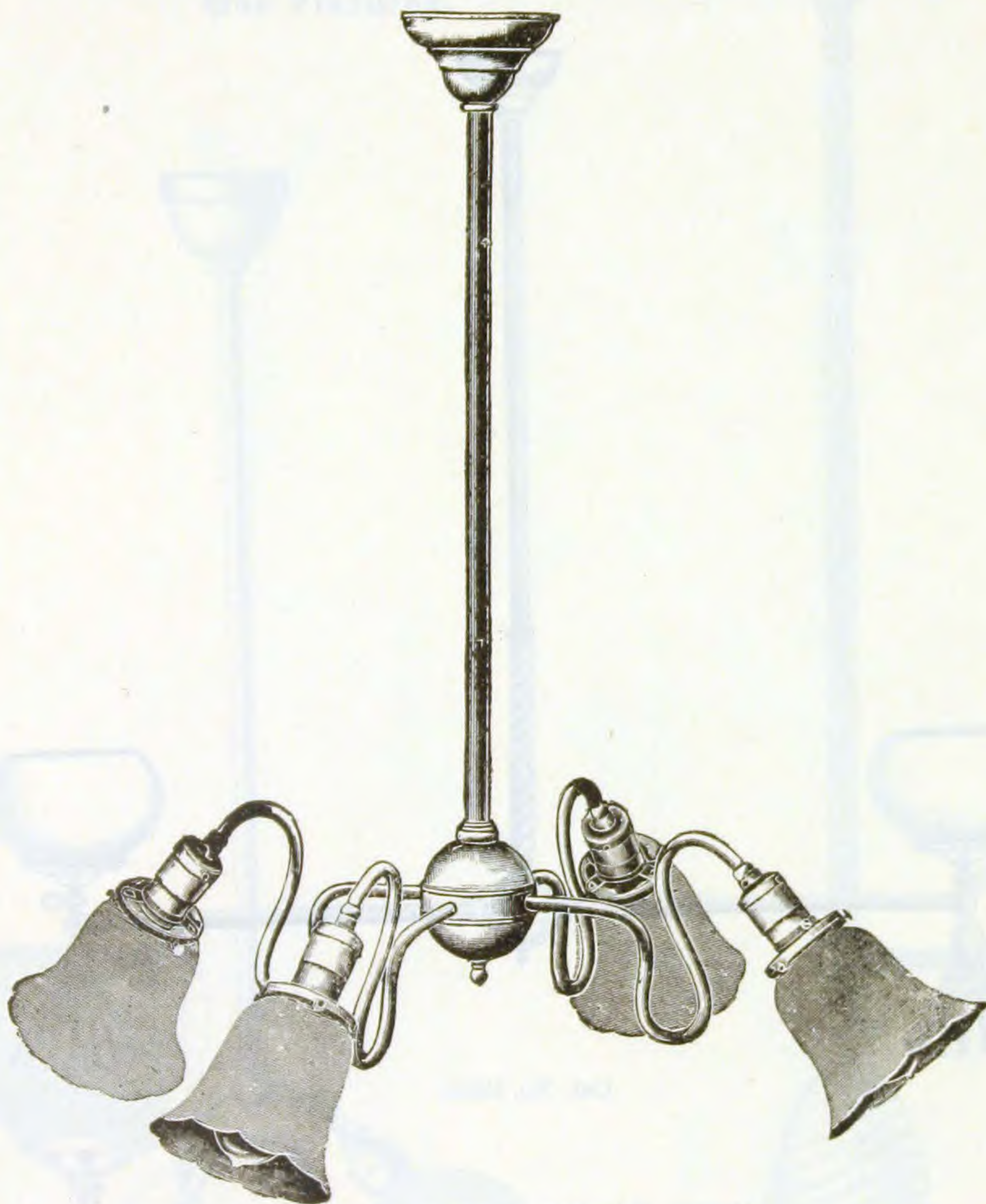
Cat. No. 11611.

Length, 40 inches. Spread, 24 inches.

Cat. No.		Price.
11609	2-Light, Electric	\$3.50
11610	3 " "	4.00
11611	4 " "	4.50



## Electric Light Fixtures.



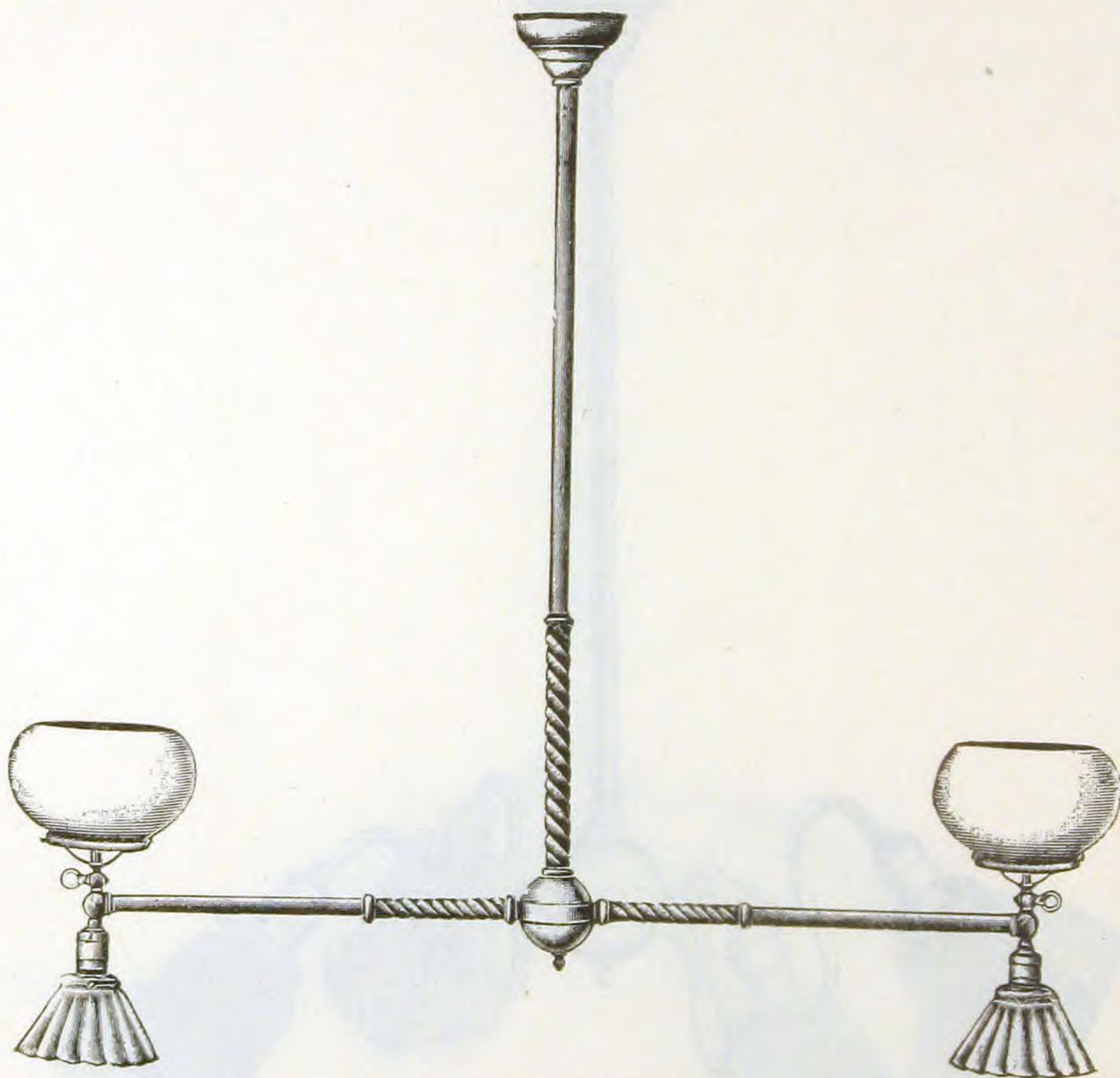
Cat. No. 11614.

Length, 36 inches. Spread, 20 inches.

Cat. No.	Price.
11612 2-Light, Electric.....	\$3.50
11613 3 " " .....	4 00
11614 4 " " .....	4.50



# Combination Electric Light and Gas Fixtures.



Cat. No. 11615.

Length, 40 inches. Spread, 36 inches.

Wired.

Cat. No.		Price.
11615	2-Light, Combination.....	\$6.50
11616	4 " " .....	11.50



Combination Electric Light and  
Gas Fixtures.



Cat. No. 11617.



Cat. No. 11618.

COMBINATION PENDANT.

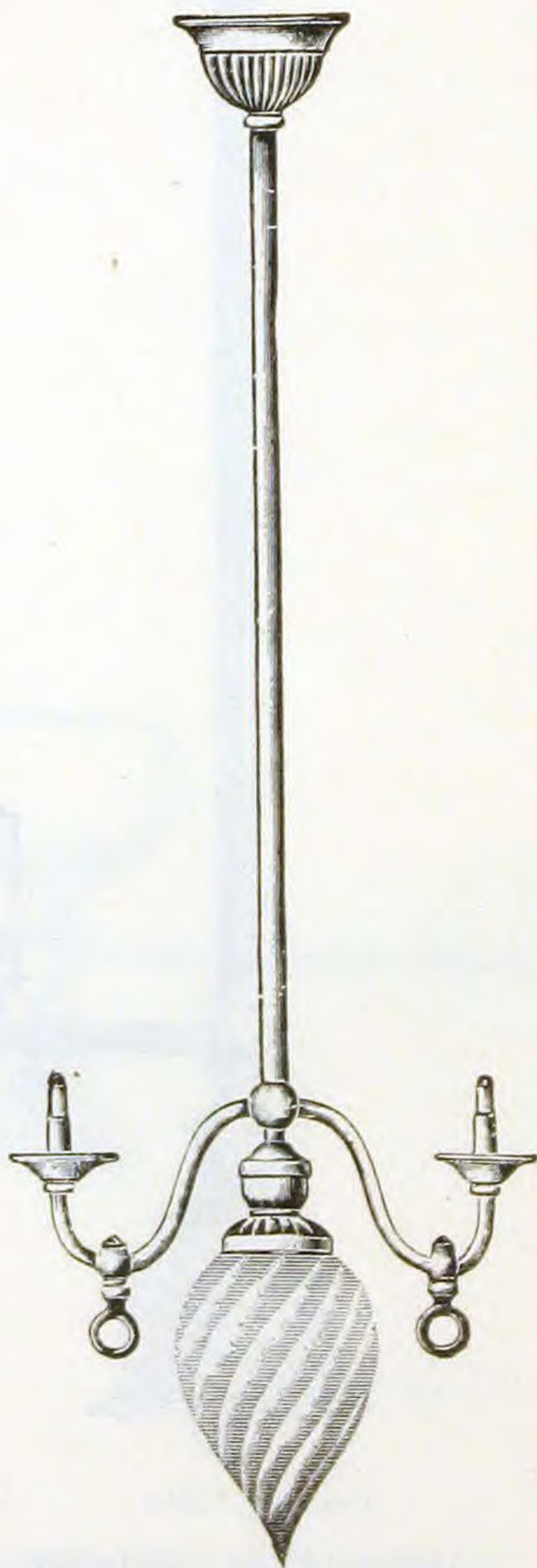
1 Gas. 1 Electric.

Cat. No.	Price.
11617 Length, 36 inches, wired.....	\$2.75

Cat. No.	Price.
11618 Length, 36 inches, wired.....	\$2.25

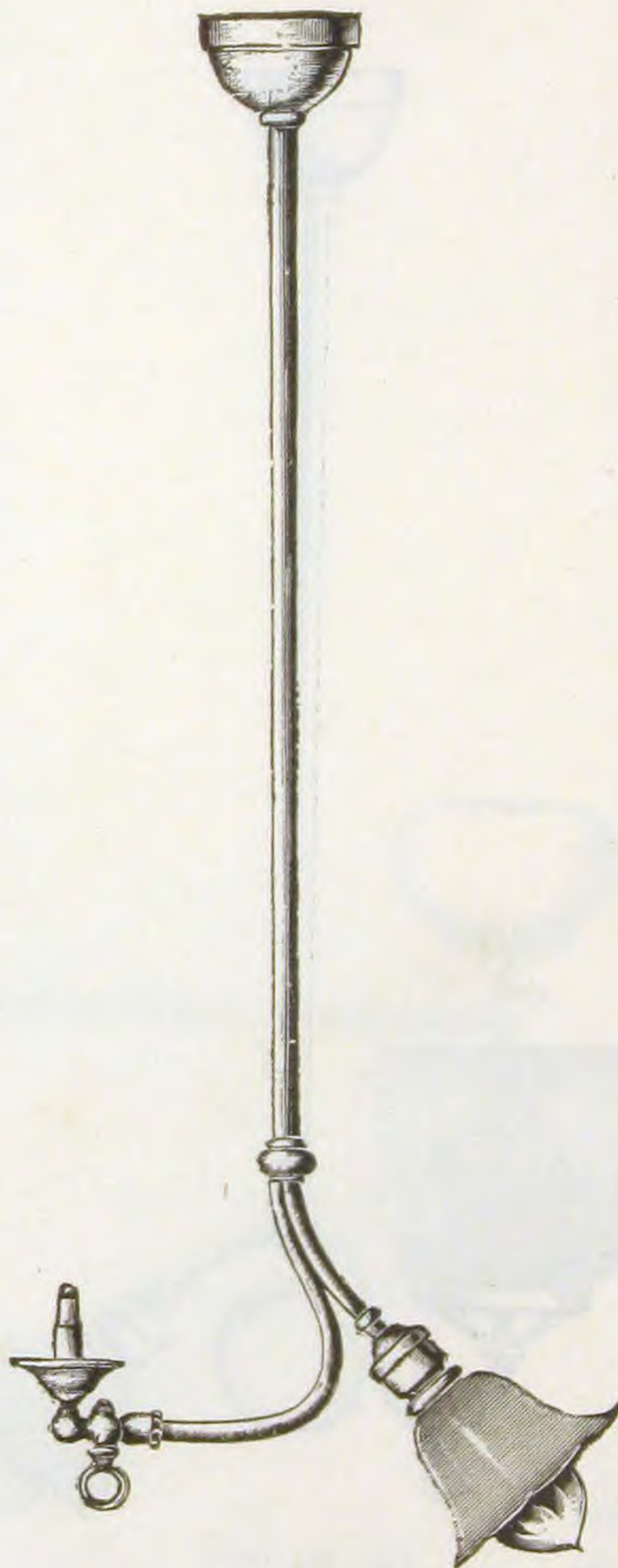


### Combination Electric Light and Gas Fixtures.



Cat. No. 11619.

Cat. No.	Price.
11619 Length, 36 inches, wired.....	\$4.25

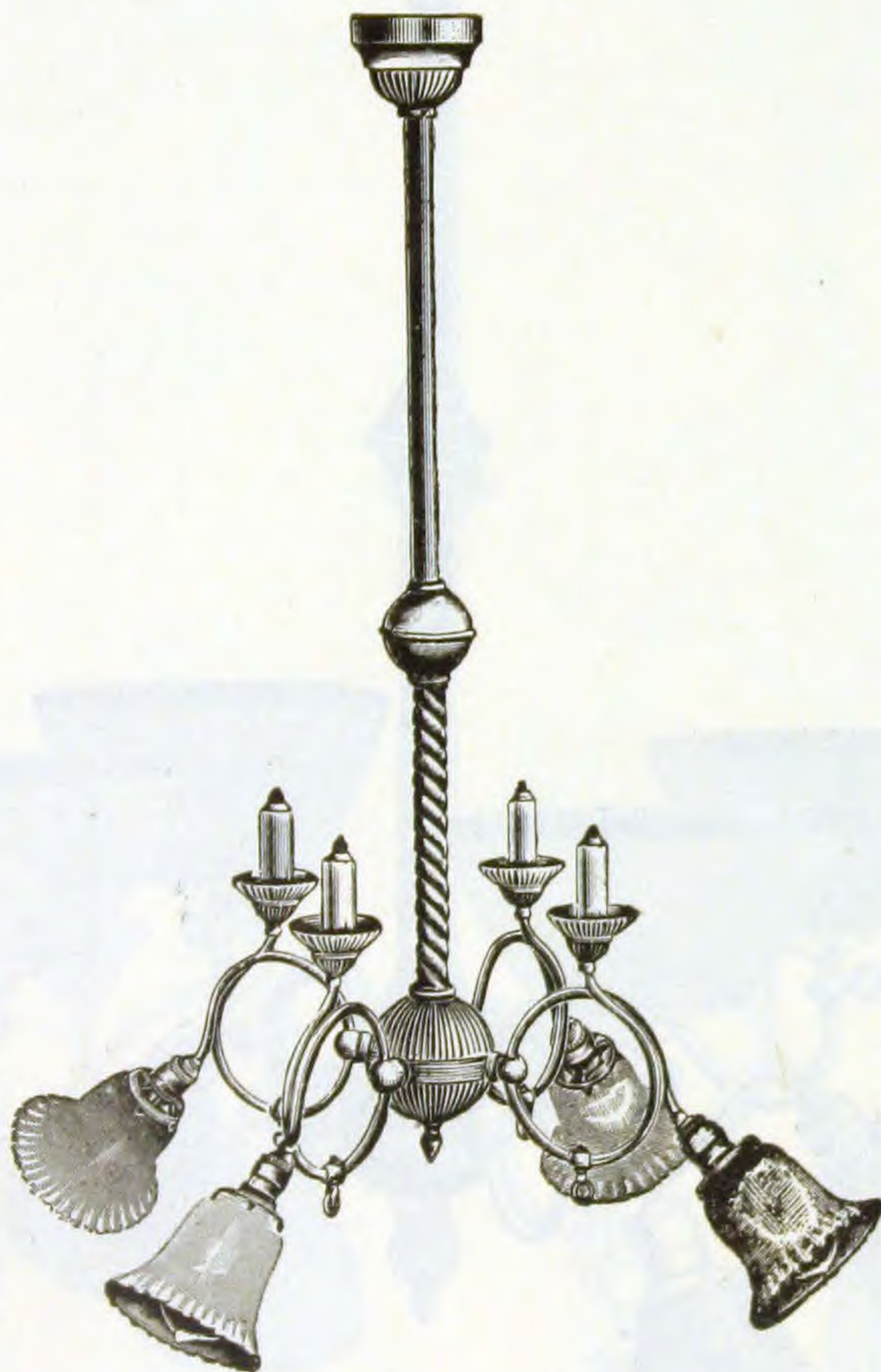


Cat. No. 11620.

Cat. No.	Price.
11620 Length, 36 inches, wired.....	\$2.50



## Combination Electric Light and Gas Fixtures.



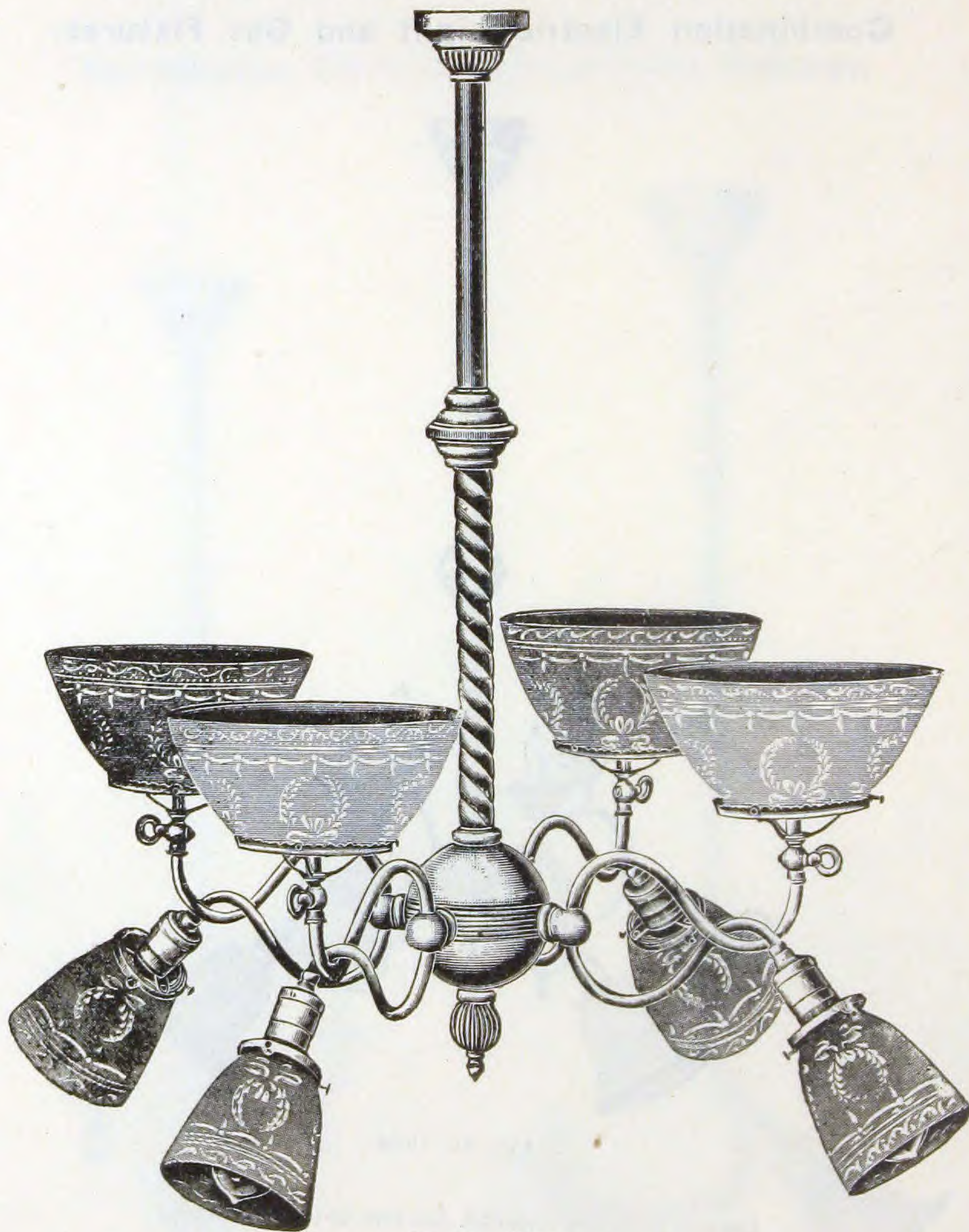
Cat. No. 11623.

Length, 40 inches. Spread, Electric, 26 inches. Wired.

Cat. No.		Price.
11621	2-Light, Combination.....	\$11.00
11622	3 " " ".....	14.00
11623	4 " " ".....	17.00



## Combination Electric Light and Gas Fixtures.



Cat. No. 11626.

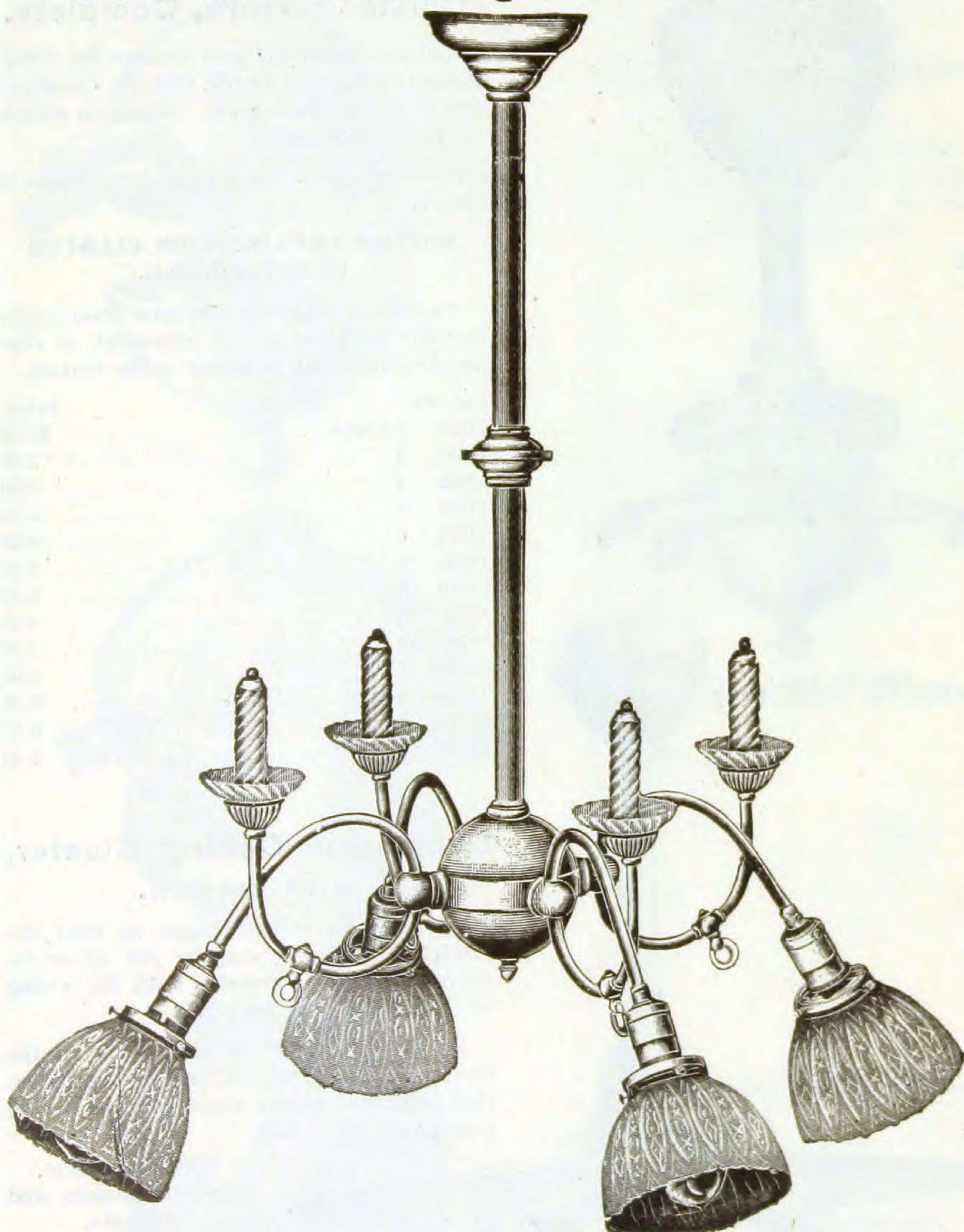
Length, 40 inches. Spread, 29 inches. Wired.

Cat. No.			Price
11624	2-Light, Combination	.....	\$11.00
11625	3 " "	.....	14.00
11626	4 " "	.....	17.00

Cat.  
11627  
11628  
11629



Combination Electric Light and Gas Fixtures.

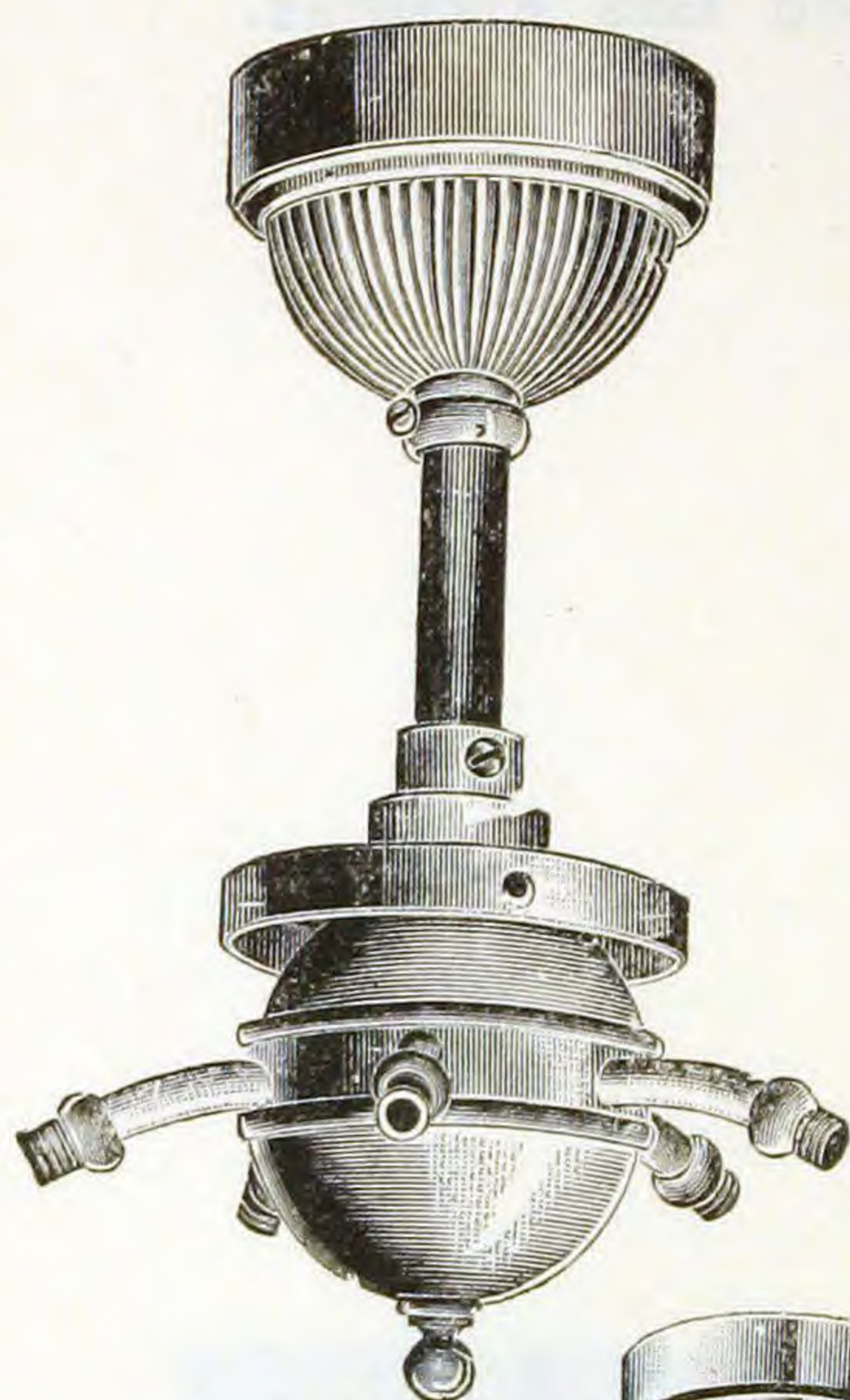


Cat. No. 11629.

Length, 40 inches. Spread, 26 inches. Wired.

Cat. No.		Price.
11627	2-Light, Combination.....	\$10.00
11628	3 " " ".....	12.50
11629	4 " " ".....	15.00





Cat. No. 11634.

### Cluster Fixture, Complete.

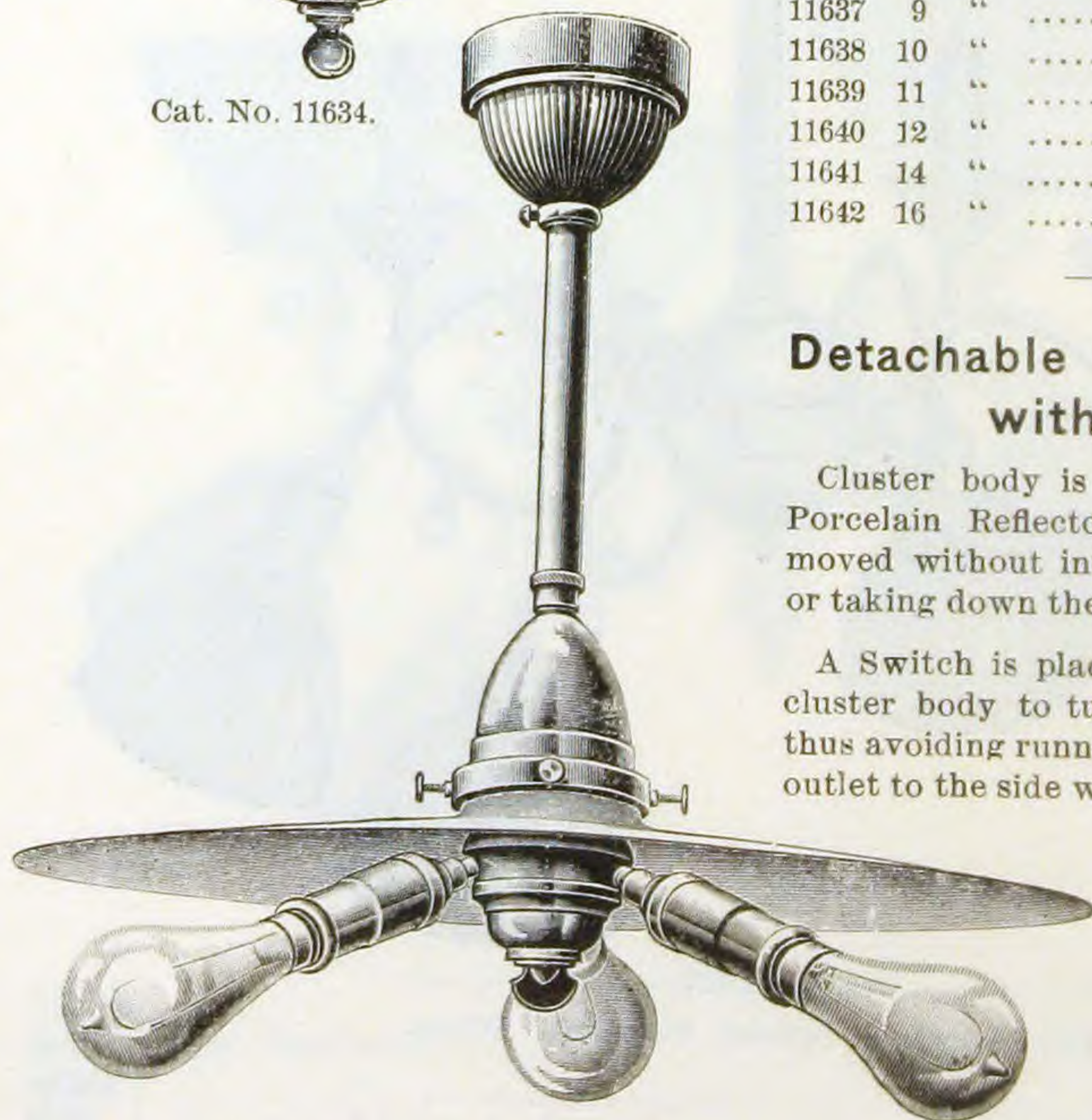
Includes Separable Ball Cluster No. 11652, Holder for 3 $\frac{1}{4}$ -inch Shade, Canopy, Crowfoot and Polished Brass Stem. Ready to attach Sockets and Shade.

Prices given are for stem up to 12 inches in length.

#### BOTTOM ORNAMENT ON CLUSTER IS DETACHABLE.

We furnish with each fixture a brass nipple to take the place of the ornament, so that another light may be added on the bottom.

Cat. No.		Price.
11630	2-Light.....	\$2 50
11631	3 " .....	2.60
11632	4 " .....	2.80
11633	5 " .....	3.10
11634	6 " .....	3.25
11635	7 " .....	3.60
11636	8 " .....	3.80
11637	9 " .....	4.10
11638	10 " .....	4.50
11639	11 " .....	4.90
11640	12 " .....	5.25
11641	14 " .....	6.10
11642	16 " .....	7.90



Cat. No. 11644.

### Detachable Ceiling Cluster, with Switch.

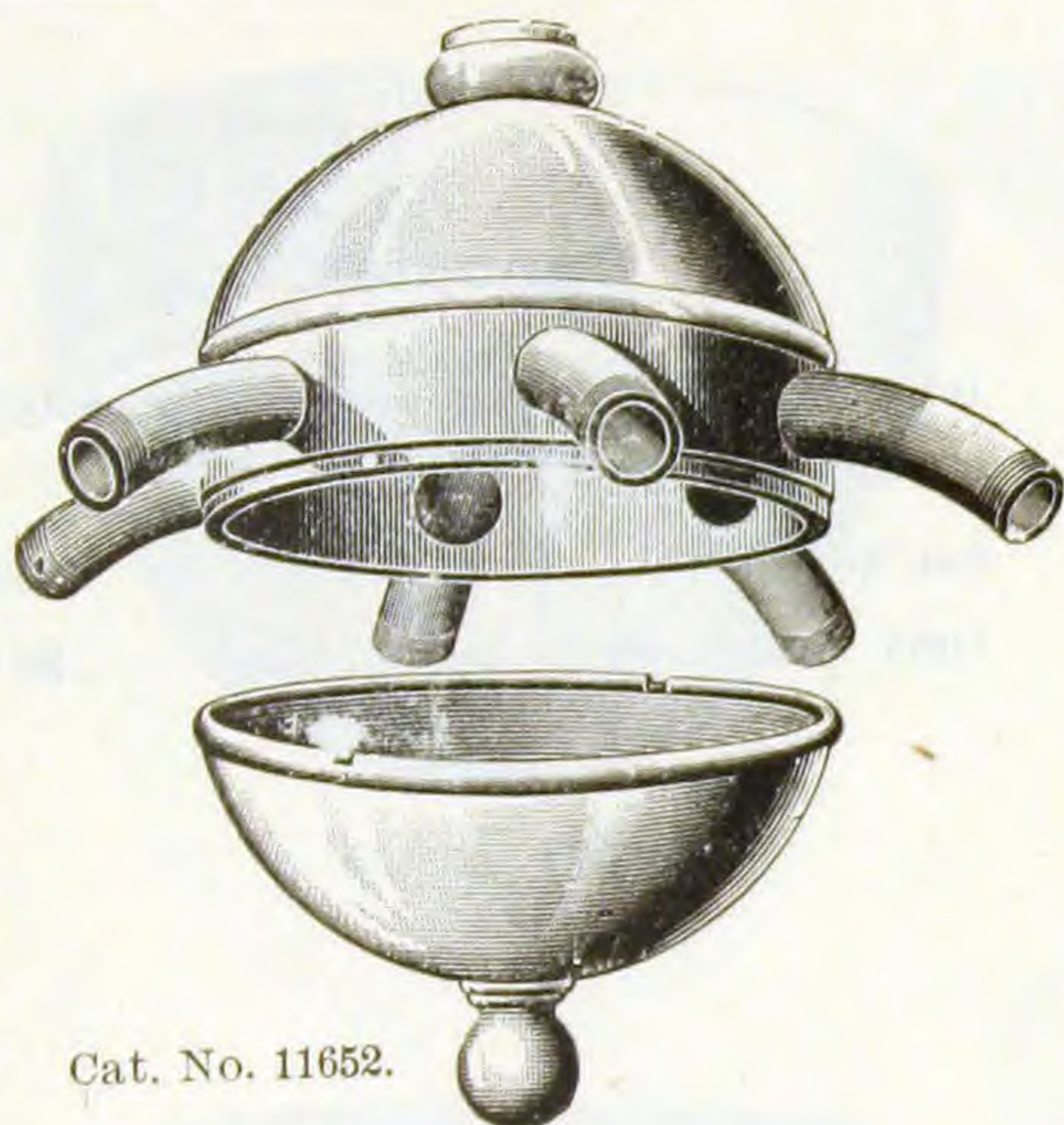
Cluster body is detachable, so that the Porcelain Reflector may be put up or removed without interfering with the wiring or taking down the fixture.

A Switch is placed in the bottom of the cluster body to turn off and on the lights, thus avoiding running wires from the ceiling outlet to the side wall.

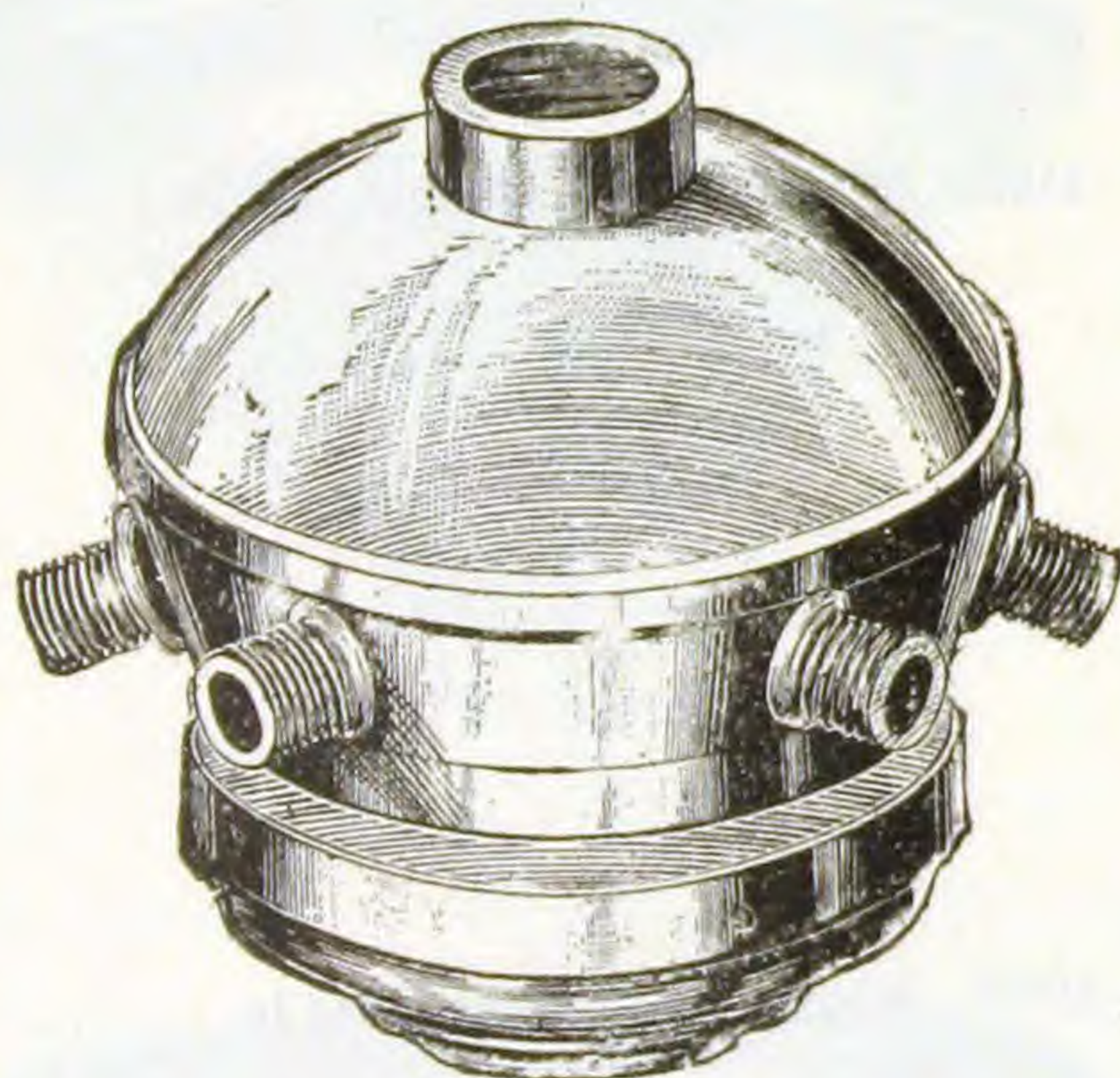
Wired complete, excepting Shade and Sockets.

Cat. No.		Price.
11643	2-Light....	\$4.00
11644	3 " ....	4.40
11645	4 " ....	4.80
11646	5 " ....	5.20
11647	6 " ....	5.60

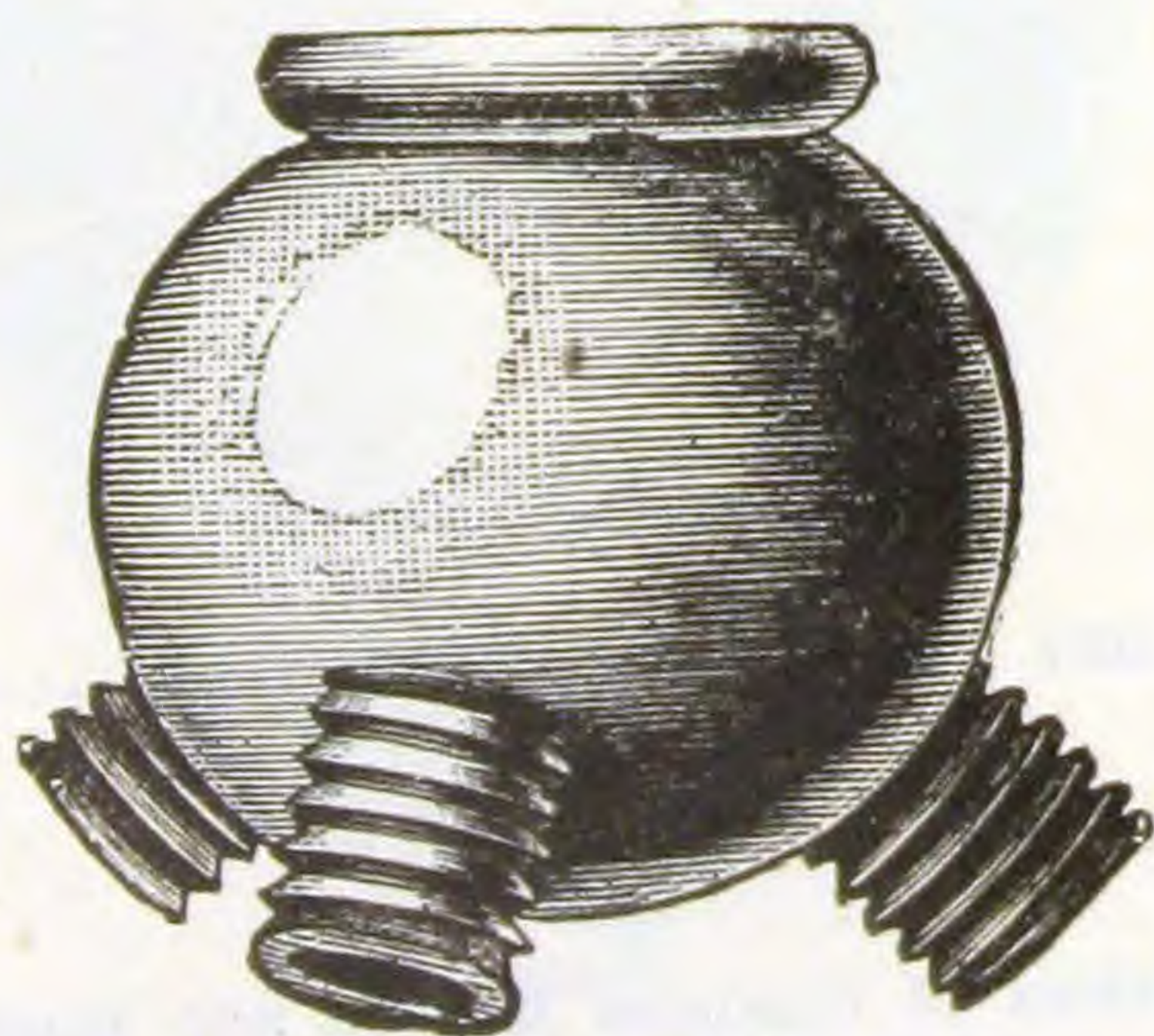




Cat. No. 11652.



Cat. No. 11664.



Cat. No. 11669.

## CLUSTER BALLS.

### Separable Ball Cluster.

Diameter, 3 inches.

Bottom ornament is removable, and may be replaced by a nipple, so that another light may be added. We furnish an extra nipple for this purpose.

Cat. No.		Price.
11648	2-Light.....	\$1.25
11649	3 ".....	1.35
11650	4 ".....	1.55
11651	5 ".....	1.85
11652	6 ".....	2.00
11653	7 ".....	2.35
11654	8 ".....	2.55
11655	9 ".....	2.85
11656	10 ".....	3.25
11657	11 ".....	3.65
11658	12 ".....	3.90
11659	14 ".....	4.75
11660	16 ".....	6.55

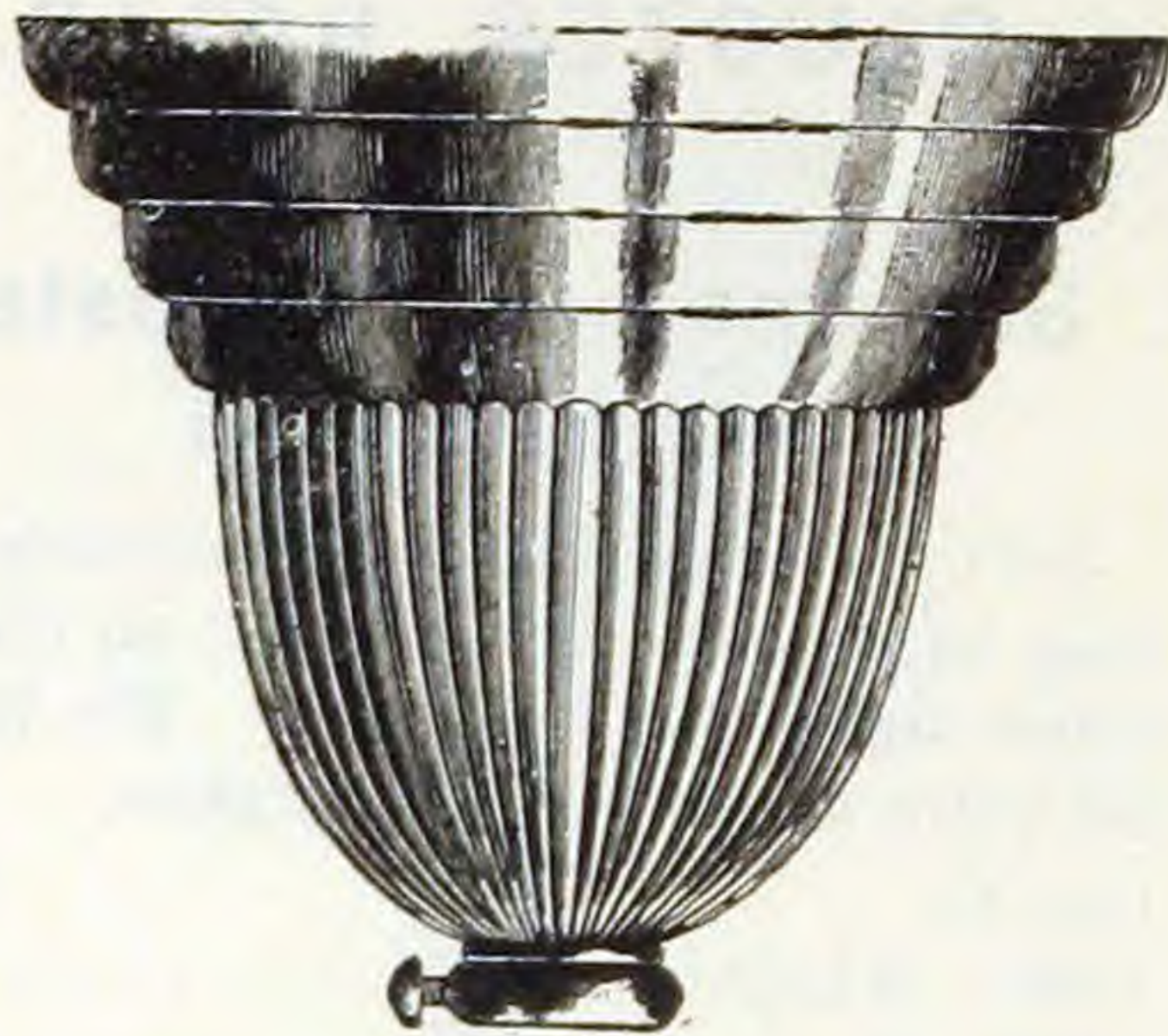
### Separable Box Cluster.

11661	2 Light.....	\$0.50
11662	3 ".....	.60
11663	4 ".....	.70
11664	5 ".....	.80
11665	6 ".....	.90
11666	8 ".....	1.00

### Solid Cluster Ball.

11667	2-Light....	\$0.40
11668	3 ".....	.48
11669	4 ".....	.56
11670	5 ".....	.64



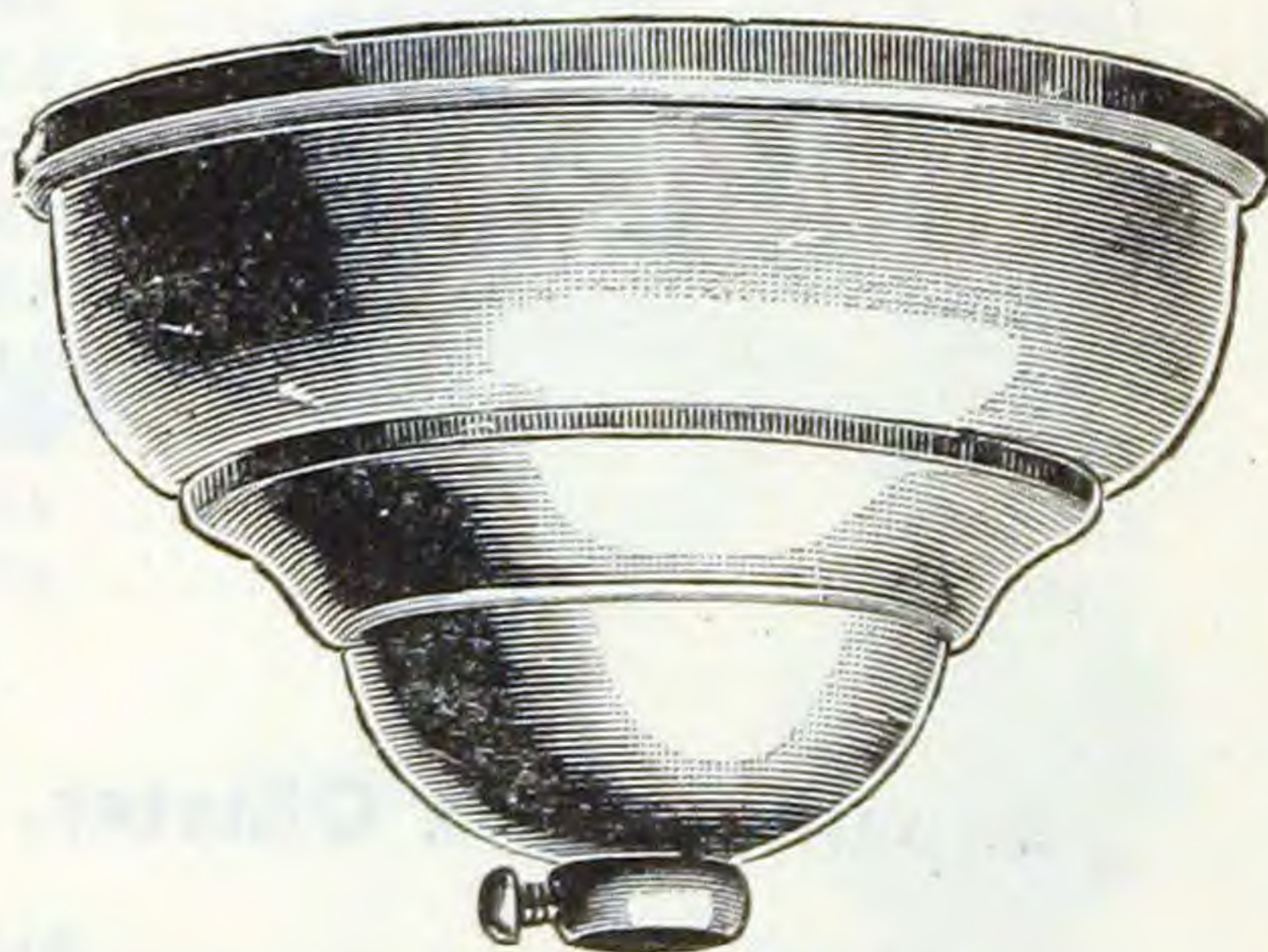


Cat. No. 11671.

### Canopies.

In ordering please state size of brass tube canopies are required to slip.

Cat. No.	Price.
11671 Width, $4\frac{5}{8}$ in.; Depth, 4 in..	.....\$0.45



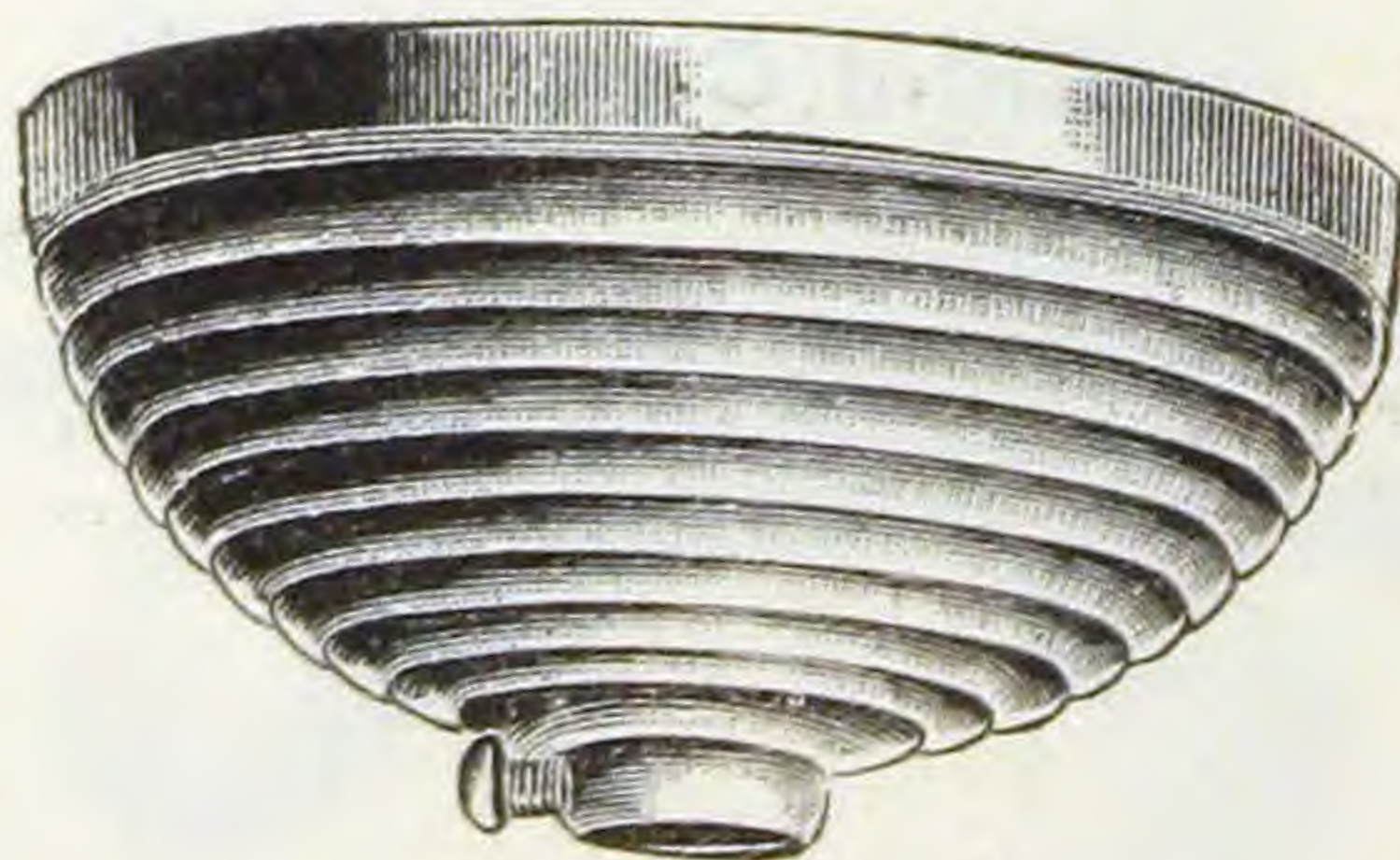
Cat. No. 11672.

11672 Width, $4\frac{1}{2}$ in.; Depth, $2\frac{5}{8}$ in..	..... .40
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Cat. No. 11673.

11673 Width, 3 in.; Depth, $1\frac{3}{8}$ in..	..... .25
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Cat. No. 11674.

11674 Width, $4\frac{1}{8}$ in.; Depth, $1\frac{3}{4}$ in..	..... .30
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Prices of canopies include Slip Rings and Polishing and Lacquering.



## Canopies.

In ordering please state size of brass tube canopies are required to slip.

Cat. No.	Price.
11675 Width, 3½ in.; Depth, 2½ in.....	\$0.30



Cat. No. 11675.



Cat. No. 11676.

11676 Width, 5 in.; Depth, 2½ in.....	.35
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Cat. No. 11677.

11677 Width, 5 in.; Depth, 4 in.....	.50
--------------------------------------	-----

Prices of canopies include Slip Rings and Polishing and Lacquering.





Cat. No. 11678.

### Canopies.

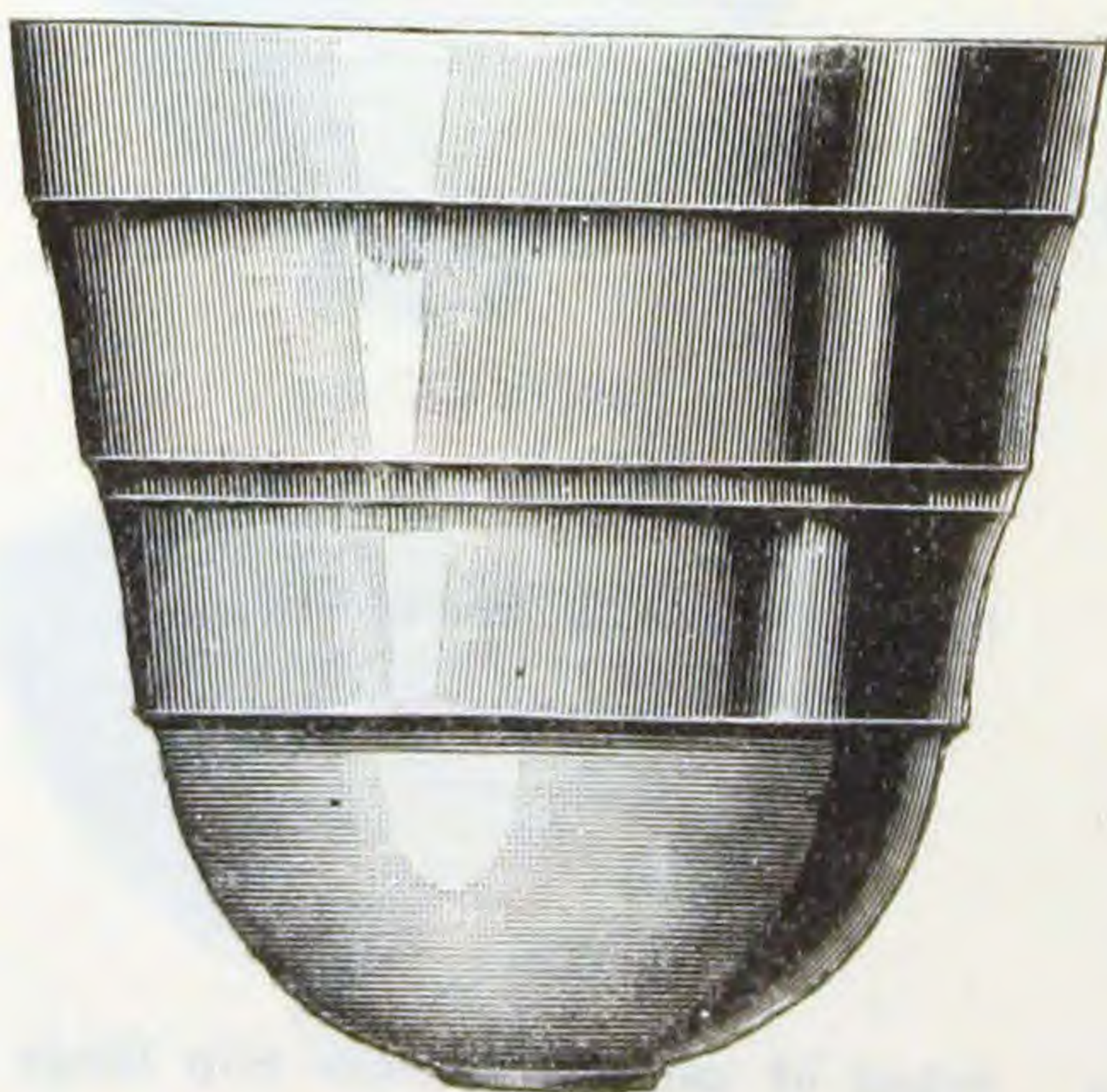
In ordering please state size of brass tube canopies are required to slip.

Cat. No.	Price.
11678 Width, 4½ in.; Depth, 2¼ in...	\$0.30



Cat. No. 11679.

11679 Width, 4 in.; Depth, 3 in.....	.35
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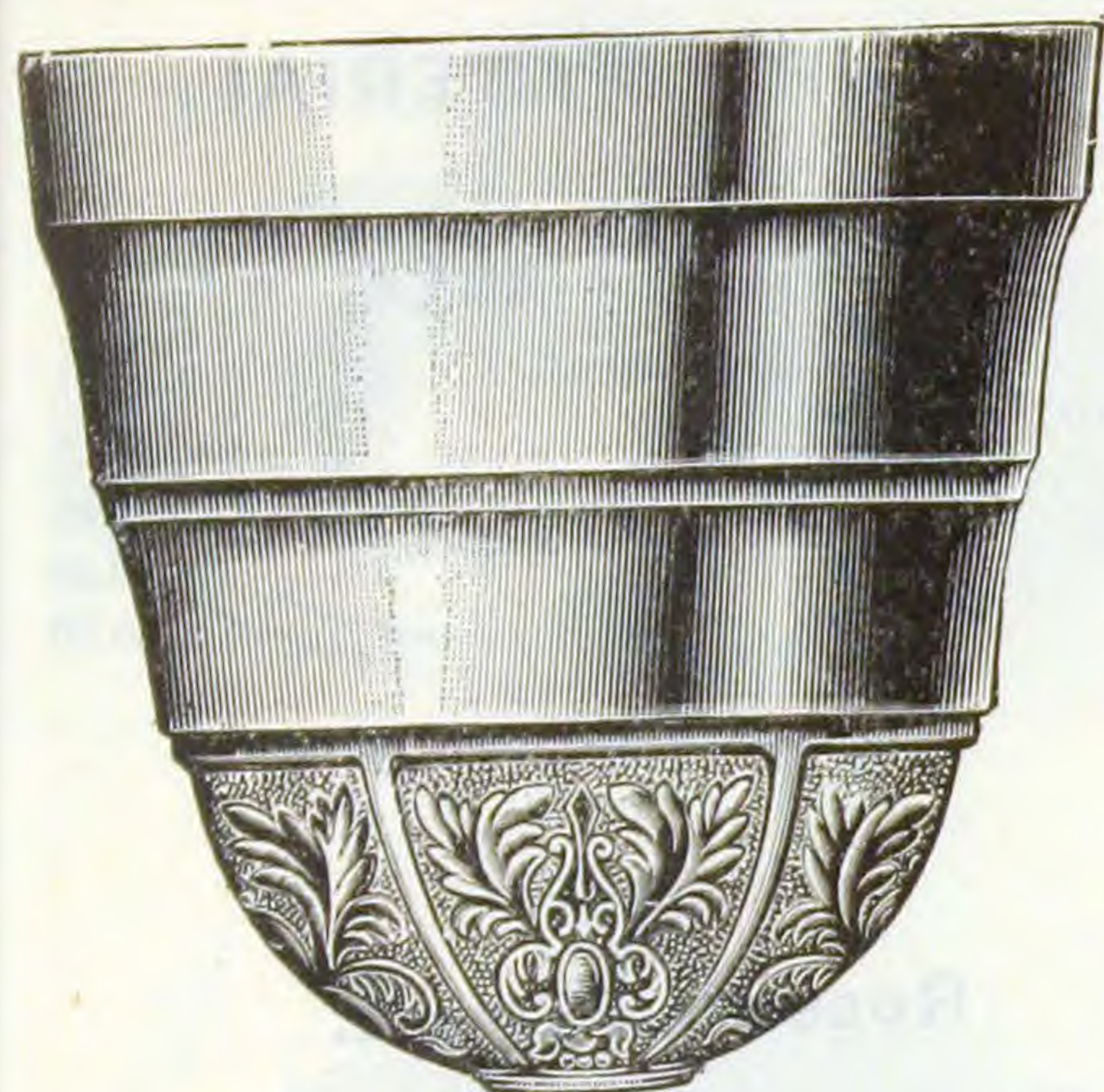


Cat. No. 11680.

11680 Width, 4 in.; Depth, 4 in... ..	.40
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Prices of canopies include Slip Rings and Polishing and Lacquering





Cat. No. 11681.

## Canopies.

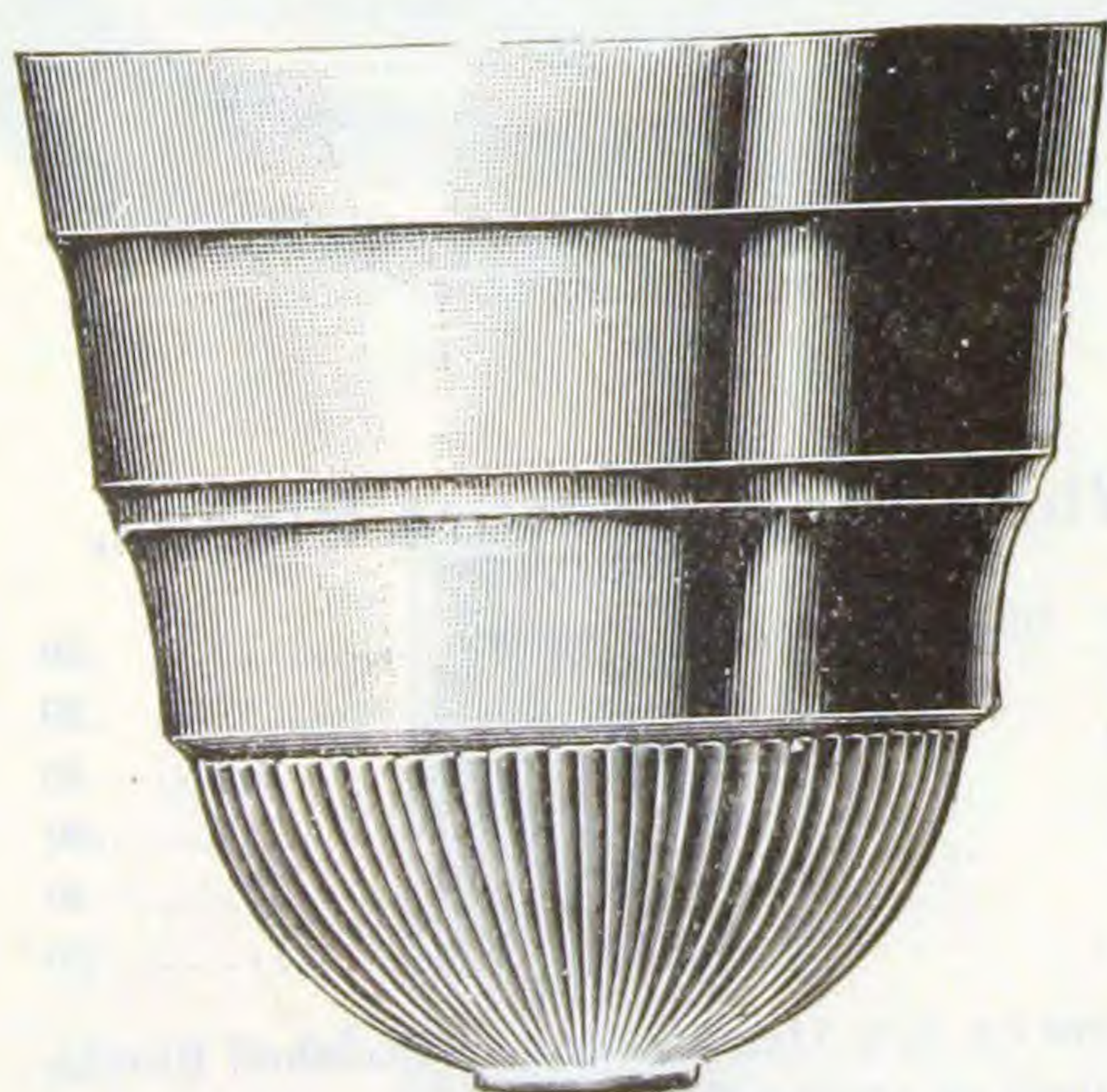
In ordering please state size of brass tube canopies are required to slip.

Cat. No.	Price.
11681 Width, 4 in.; Depth, 4 in.....	\$0.45



Cat. No. 11682.

11682 Width, 4 in.; Depth, 2¼ in.....	.30
---------------------------------------	-----

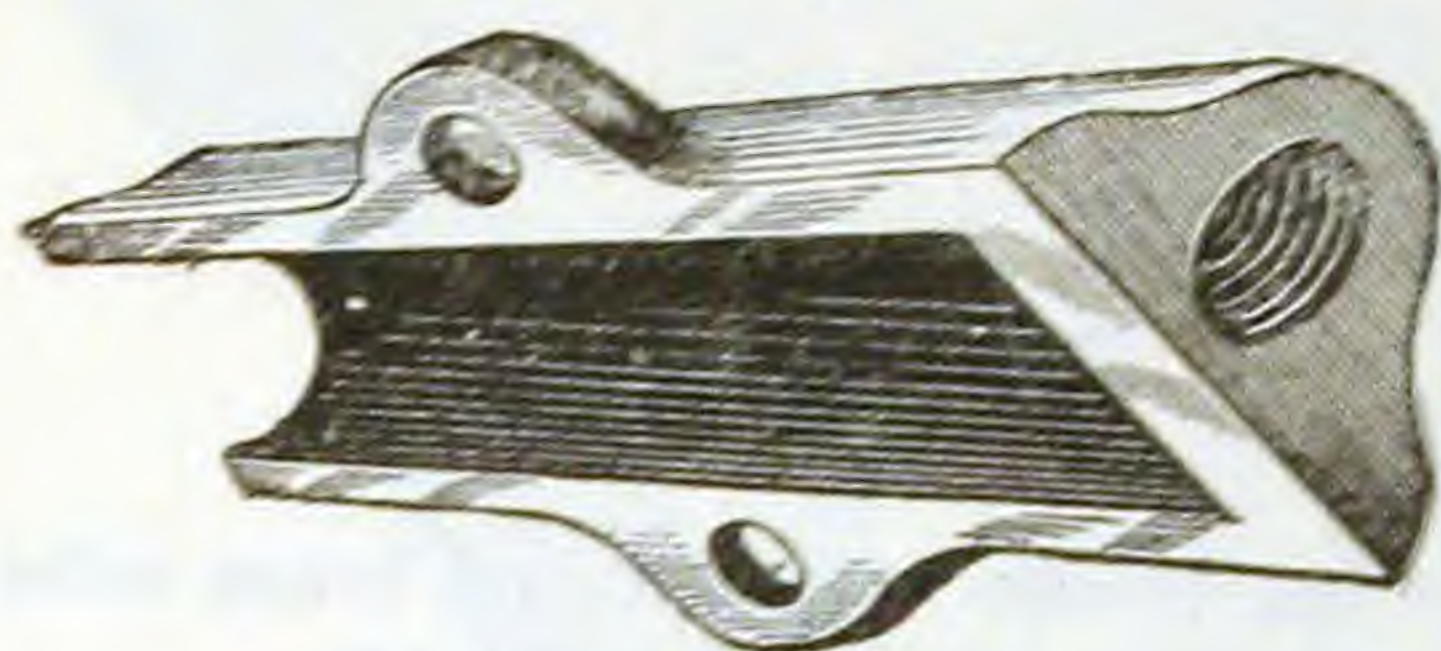


Cat. No. 11683.

11683 Width, 4 in.; Depth, 4 in....	.40
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Prices of canopies include Slip Rings and Polishing and Lacquering.





Cat. No. 11684.



Cat. No. 11687.



Cat. No. 11688.



Cat. No. 11690.



Cat. No. 11692.

### FIXTURE MATERIAL.

### Fishtail Flange.

(Cast Brass.)

Cat. No.	Size.	Price.
11684	Thread, $\frac{3}{8}$ in., brass, per 100	\$50.00
11685	" $\frac{1}{2}$ " " "	50.00
11686	" $\frac{5}{8}$ " " "	50.00

### Rosette Cut-out.

With Brass Cap for  $\frac{3}{8}$  Brass Thread.

11687	For cleat, moulding or concealed work, as specified, per 100.....	40.00
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### Kerosene Lamp Attachment.

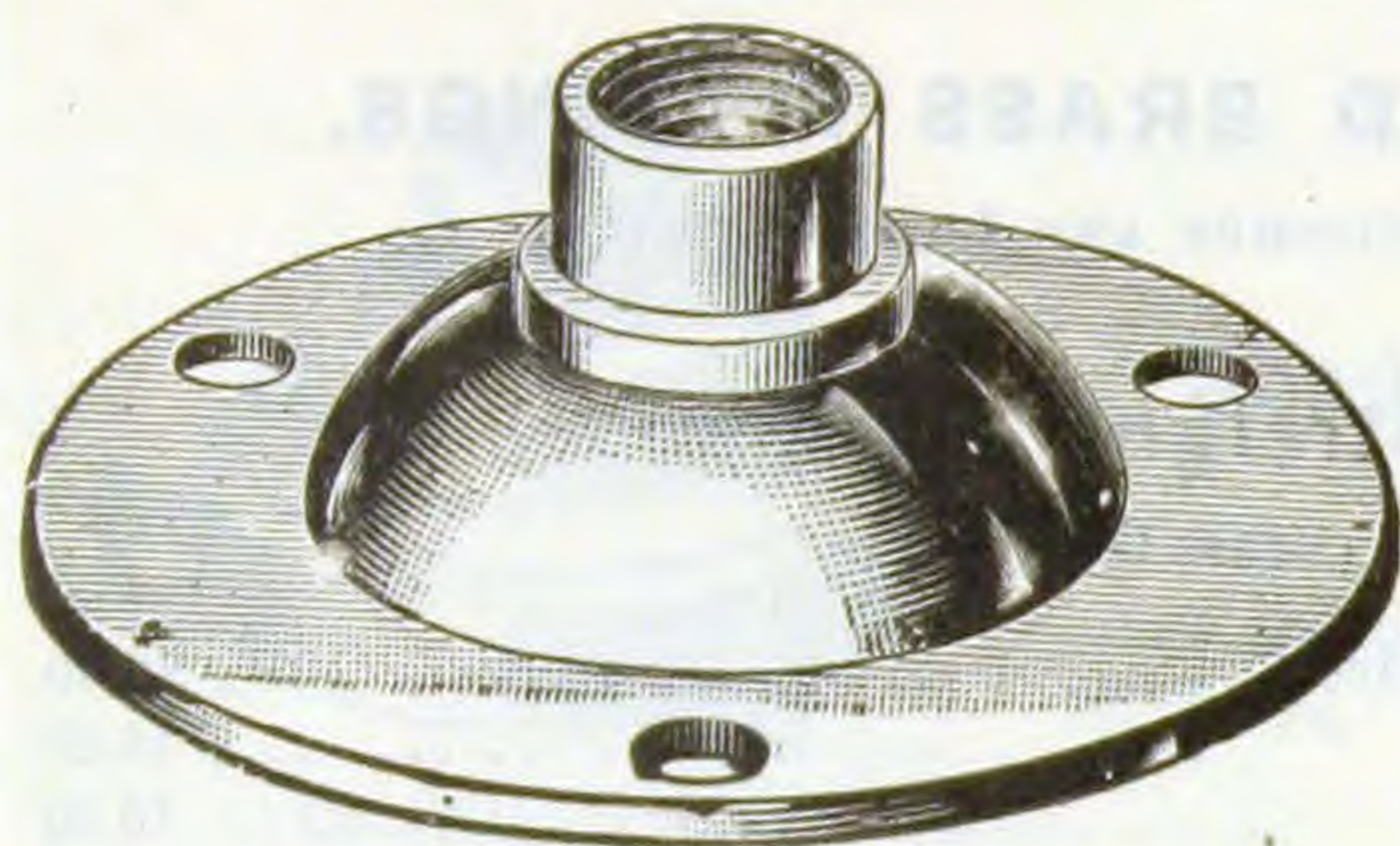
11688	Plain, each.....	.70
11689	Insulated, each.....	.70

## White Wood Fixture Blocks.

11690	Diameter 4 inches, each, .....				.20
11691	"	5	"	" .....	.30
11692	"	6	"	" .....	.40
11693	"	4	"	" .....	.30
11694	"	5	"	" .....	.40
11695	"	6	"	" .....	.50

Prices on Ash, Oak and Cherry Polished Blocks  
furnished on application.





Cat. No. 11696.

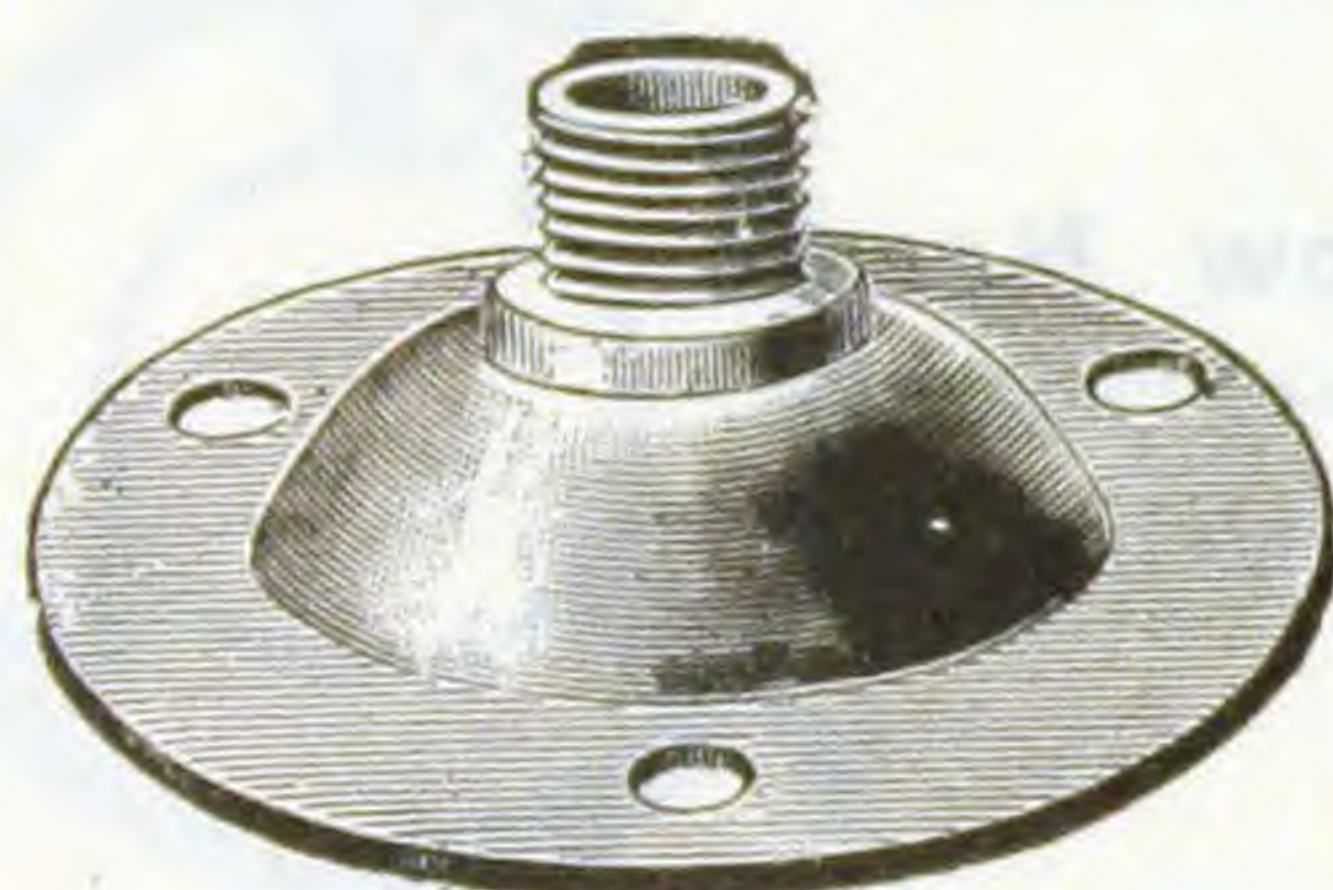
### Wall Plates.

Size, 2 inches.

Cat. No.

Price  
per 100.

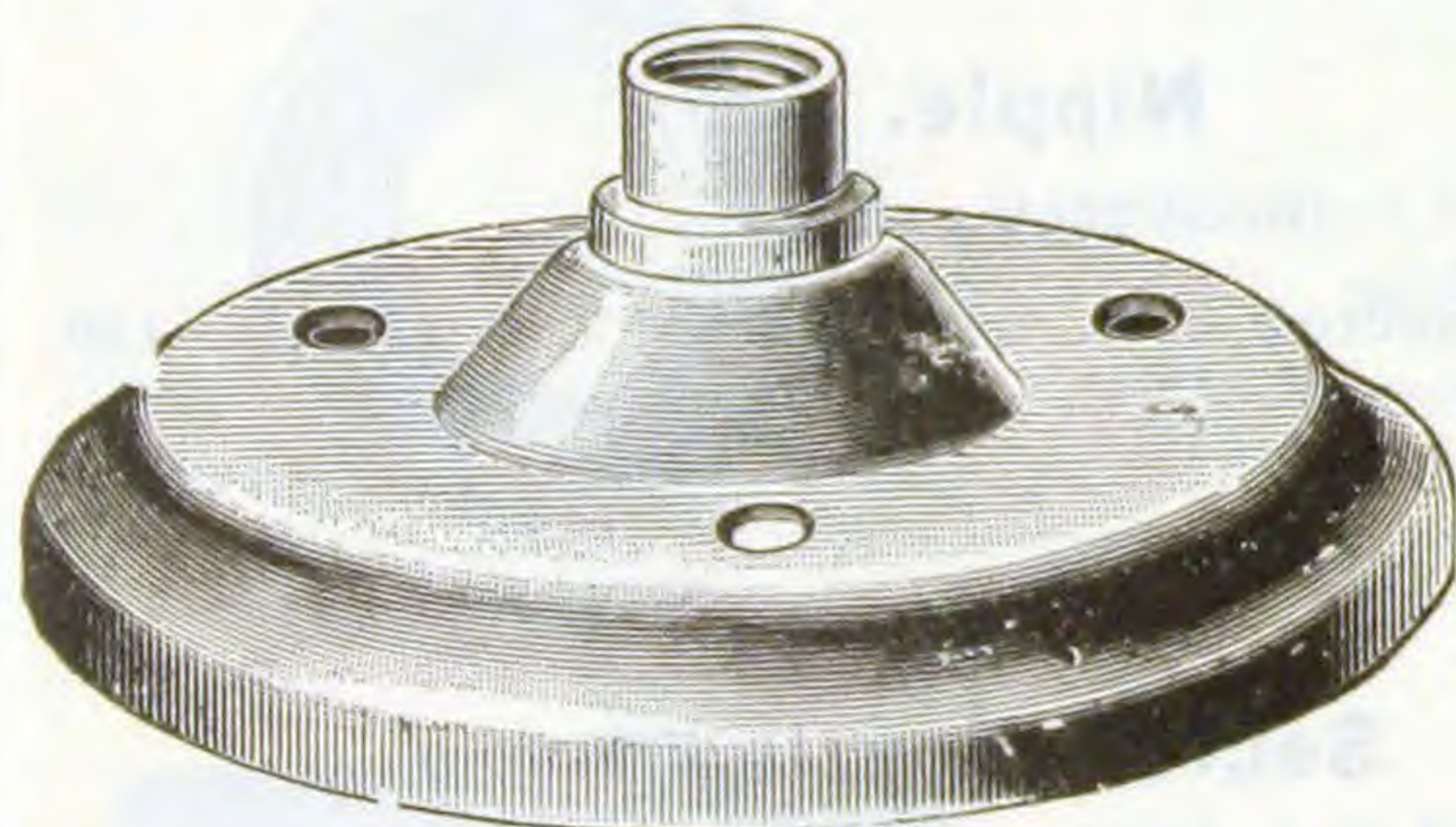
11696 Thread, female,  $\frac{3}{8}$  Brass.....\$10.00



Cat. No. 11697.

Size, 2 inches.

11697 Thread, male,  $\frac{3}{8}$  Brass..... 12.50



Cat. No. 11698.

Size, 3 inches.

11698 Thread, female,  $\frac{3}{8}$  Brass..... 25.00

11699 Thread, male,  $\frac{3}{8}$  Brass..... 25.00



Cat. No. 11700.

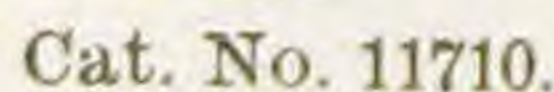
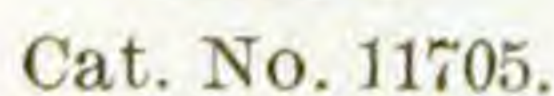
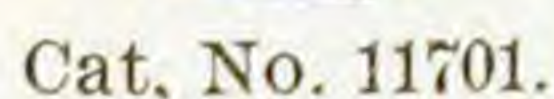
### Strap Wall Plate.

For Moulding.

Size, 2 x  $\frac{3}{4}$  inches.

11700 Thread, female,  $\frac{3}{8}$  Brass..... 25.00





(POLISHED AND LACQUERED.)

(Brass tubing sizes.)

Cat. No.		Price.
11701	$\frac{3}{8} \times \frac{3}{8}$ , per hundred.....	\$6.00
11702	$\frac{7}{16} \times \frac{3}{8}$ " .....	10.00
11703	$\frac{1}{2} \times \frac{3}{8}$ " .....	10.00
11704	$\frac{5}{8} \times \frac{3}{8}$ " .....	12.50

(Brass tubing sizes.)

11705	$\frac{3}{8} \times \frac{3}{8}$ , per hundred	12.50
11706	$\frac{7}{16} \times \frac{3}{8}$ "	12.50
11707	$\frac{1}{2} \times \frac{3}{8}$ "	12.50

(Brass tubing size.)

11708	$\frac{3}{8} \times \frac{3}{8}$ , per hundred	4.00
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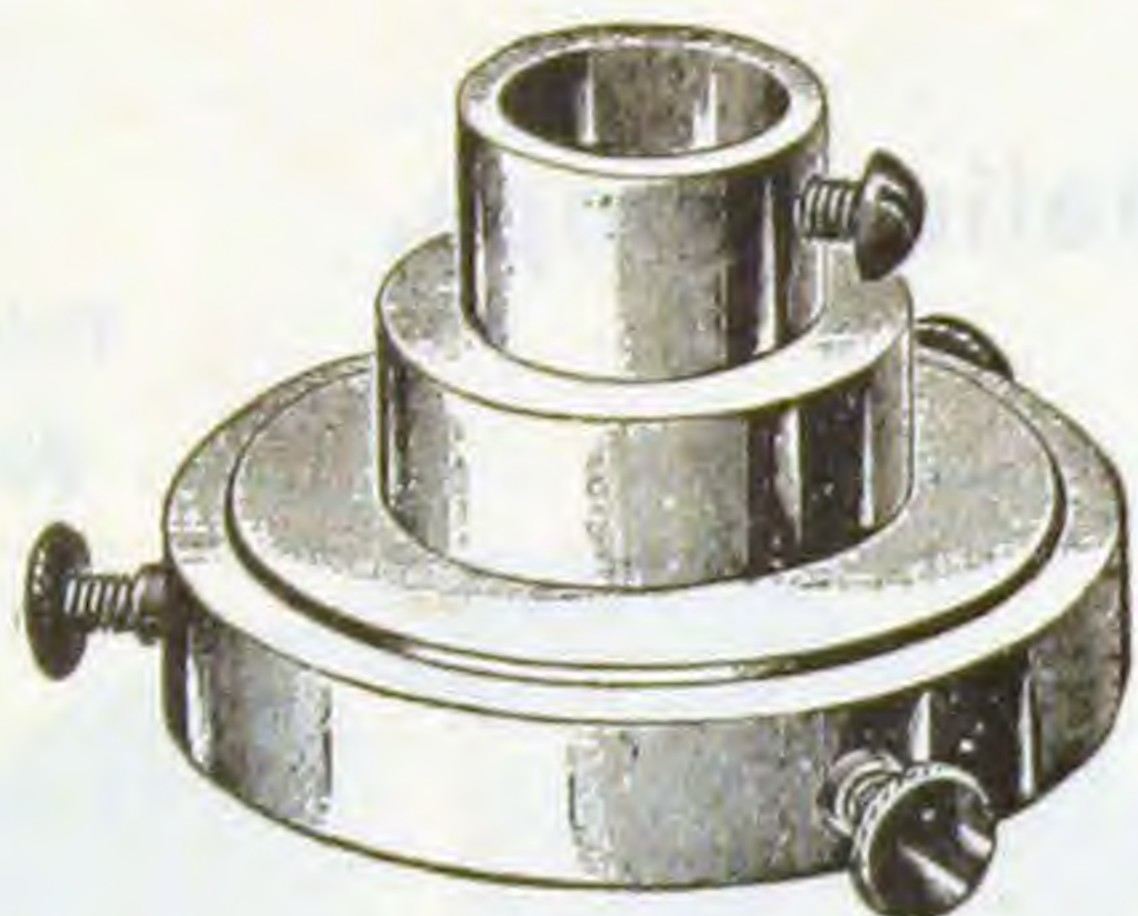
11709	5/8 Brass to burner size, per hundred. . . . .	15.00
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(Iron pipe sizes.)

11710	1/8 inch, per hundred.....	15.00
11711	1/4 " " .....	15.00
11712	3/8 " " .....	15.00



## FIXTURE SUPPLIES.



Cat. No. 11713.

### Shade Holder for Cluster Lights.

Slips  $\frac{5}{8}$  inch Tube.

Cat. No.		Price.
11713	$2\frac{1}{4}$ inch, each.	\$0.30
11714	$3\frac{1}{4}$ " " "	.40



Cat. No. 11715.

### Acme Shade Holder.

Will Fit Any Socket.

11715	$2\frac{1}{4}$ inch, per gross.	10.00
11716	$3\frac{1}{4}$ " " "	15.00



Cat. No. 11717.

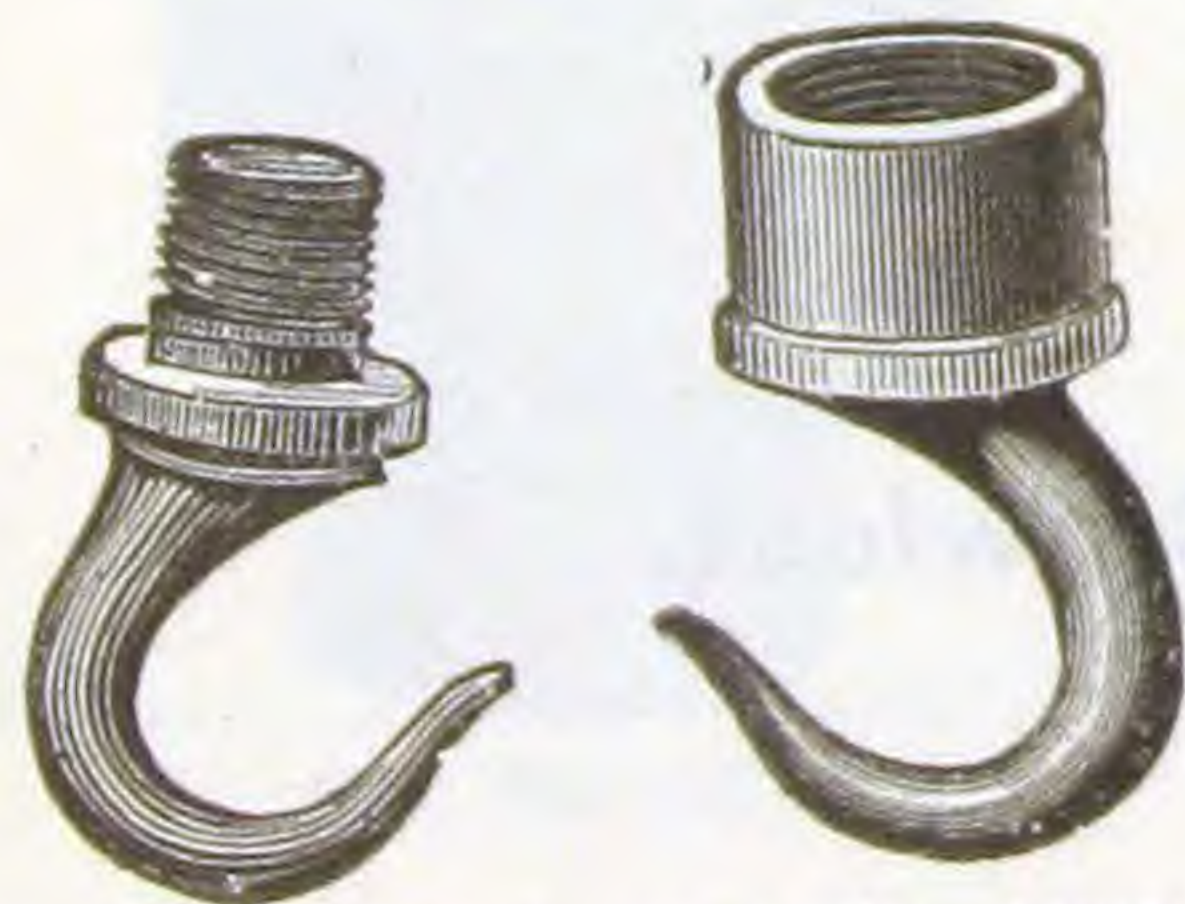
### Socket Rings.

11717	Hard Rubber Ring for Standard Edison Socket, each.	.10
11718	Porcelain Ring for Standard Edison Socket, each	.07



Cat. No. 11719.

11719	Soft Rubber Socket Cover, each.	.20
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Cat. No. 11720. Cat. No. 11722.

### Chandelier Hooks.

11720	$\frac{3}{8}$ inch, male, per 100	5.00
11721	$\frac{1}{2}$ " " " "	5.00
11722	$\frac{3}{8}$ inch, female, per 100.	5.00
11723	$\frac{1}{2}$ " " " "	5.00





Cat. No. 11724.

### Iron Chandelier Loops.

Cat. No.	Price.
11724 Closed, per dozen.....	\$3.00



Cat. No. 11725.

### Gas Attachments.

11725 Polished Brass, per 100.....	10.00
------------------------------------	-------



Cat. No. 11727.

11726 Stamped Brass, not polished, per 100.....	9.00
11727 " polished, " .....	12.00

### Flexible Brass Chain.

This Chain will cover No. 16 Cord, or smaller sizes. Extra size Chain made only on special orders. Standard Chain is made in lengths of 25 feet, but it is easily separated or spliced, and it is easily attached.



Cat. No. 11729.

11728 Brass, per foot.....	.15
11729 Nickel, " .....	.20



Cat. No. 11730.

### Iron Duopod.

11730 Tapped $\frac{1}{8}$ to $\frac{1}{2}$ inch, per dozen.....	1.00
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Cat. No. 11731.

### Iron Tripod.

11731 Per dozen.....	75
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Cat. No. 11732.

### Iron Crowfoot.

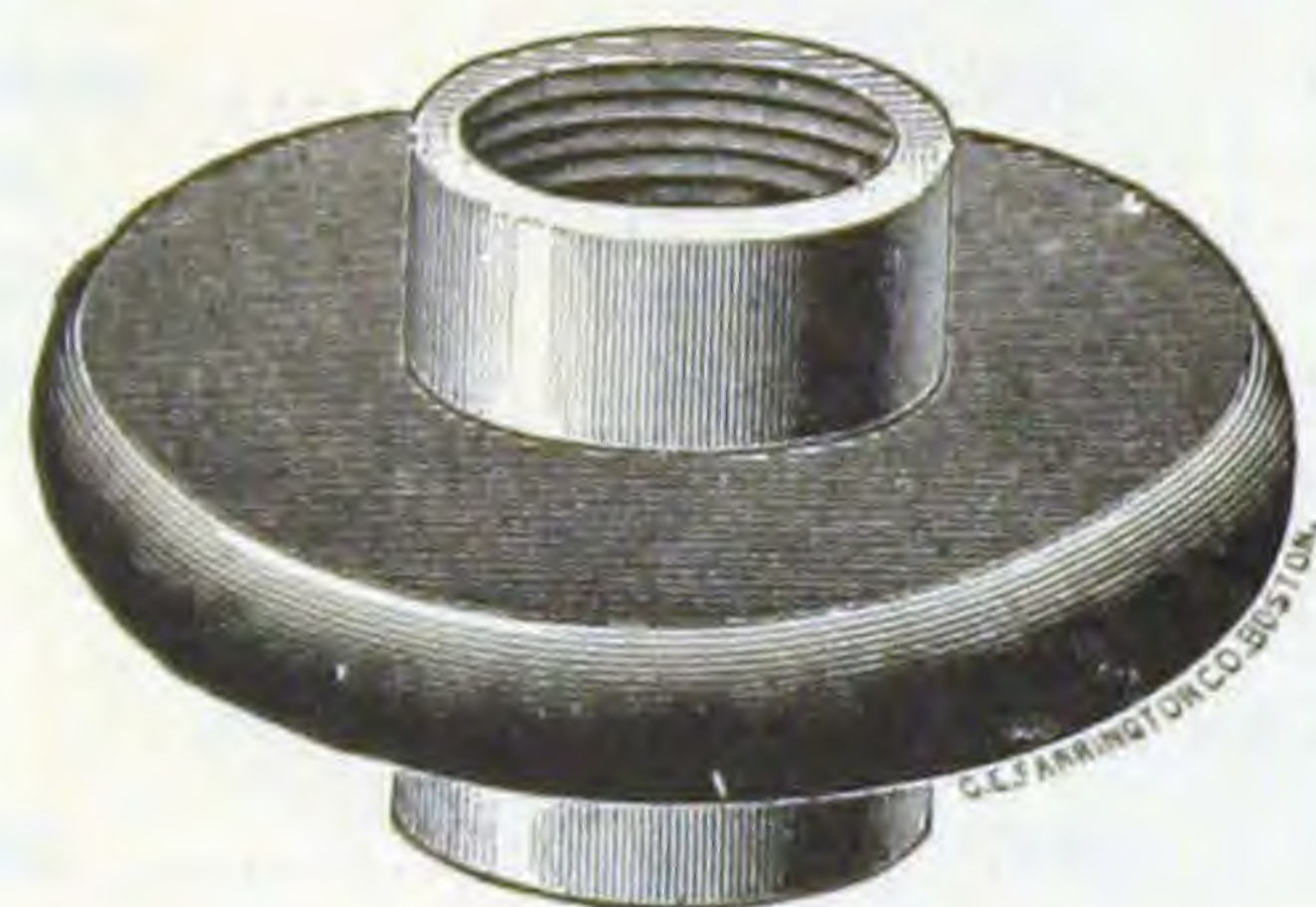
11732 Per dozen.....	.70
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## The Macallen Solid Mica Chandelier Joints.

IN COMPOSITION BRASS.

Combination. Cat. No.	Size.	Price.	Blank. Cat. No.
11733	$\frac{3}{8}$ x $\frac{1}{8}$	\$0.50	11750
11734	$\frac{3}{8}$ x $\frac{1}{4}$	.50	11751
11735	$\frac{3}{8}$ x $\frac{3}{8}$	.50	11752
11736	$\frac{1}{2}$ x $\frac{1}{8}$	.66 $\frac{2}{3}$	11753
11737	$\frac{1}{2}$ x $\frac{1}{4}$	.66 $\frac{2}{3}$	11754
11738	$\frac{1}{2}$ x $\frac{3}{8}$	.66 $\frac{2}{3}$	11755
11739	$\frac{1}{2}$ x $\frac{1}{2}$	.66 $\frac{2}{3}$	11756
11740	$\frac{3}{4}$ x $\frac{3}{8}$	1.00	11757
11741	$\frac{3}{4}$ x $\frac{1}{2}$	1.00	11758
11742	$\frac{3}{4}$ x $\frac{3}{4}$	1.00	11759
11743	1 x $\frac{1}{2}$	1.60	11760
11744	1 x $\frac{3}{4}$	1.60	11761
11745	1 x 1	1.60	11762
11746	$1\frac{1}{4}$ x 1	2.20	11763
11747	$1\frac{1}{4}$ x $1\frac{1}{4}$	2.20	11764
11748	$1\frac{1}{2}$ x $1\frac{1}{2}$	4.00	11765
11749	2 x 2	6.00	11766

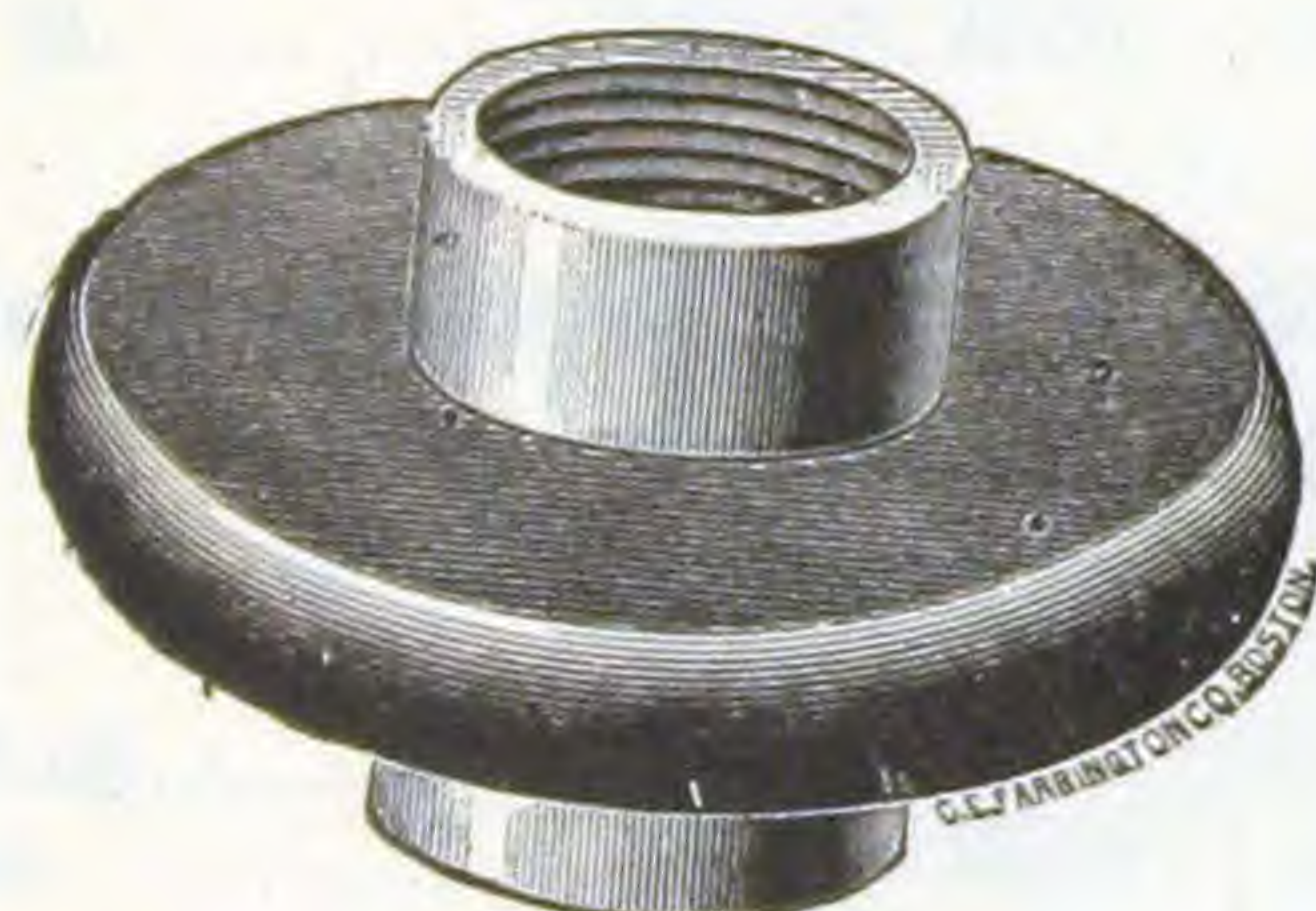


Cat. No. 11733.

## The Macallen Solid Mica Chandelier Joints.

IN MALLEABLE IRON.

Combination. Cat. No.	Size.	Price.	Blank. Cat. No.
11767	$\frac{3}{8}$ x $\frac{1}{8}$	\$0.45	11780
11768	$\frac{3}{8}$ x $\frac{1}{4}$	.45	11781
11769	$\frac{3}{8}$ x $\frac{3}{8}$	.45	11782
11770	$\frac{1}{2}$ x $\frac{1}{8}$	.60	11783
11771	$\frac{1}{2}$ x $\frac{1}{4}$	.60	11784
11772	$\frac{1}{2}$ x $\frac{3}{8}$	.60	11785
11773	$\frac{1}{2}$ x $\frac{1}{2}$	.60	11786
11774	$\frac{3}{4}$ x $\frac{3}{8}$	.90	11787
11775	$\frac{3}{4}$ x $\frac{1}{2}$	.90	11788
11776	$\frac{3}{4}$ x $\frac{3}{4}$	.90	11789
11777	1 x $\frac{1}{2}$	1.45	11790
11778	1 x $\frac{3}{4}$	1.45	11791
11779	1 x 1	1.45	11792



Cat. No. 11767.

IN COMPOSITION BRASS.

11793	$\frac{3}{8}$ x $\frac{1}{8}$	\$0.40	11799
11794	$\frac{3}{8}$ x $\frac{1}{4}$	.40	11800
11795	$\frac{3}{8}$ x $\frac{3}{8}$	.40	11801
11796	$\frac{1}{2}$ x $\frac{1}{8}$	.54	11802
11797	$\frac{1}{2}$ x $\frac{1}{4}$	.54	11803
11798	$\frac{1}{2}$ x $\frac{3}{8}$	.54	11804

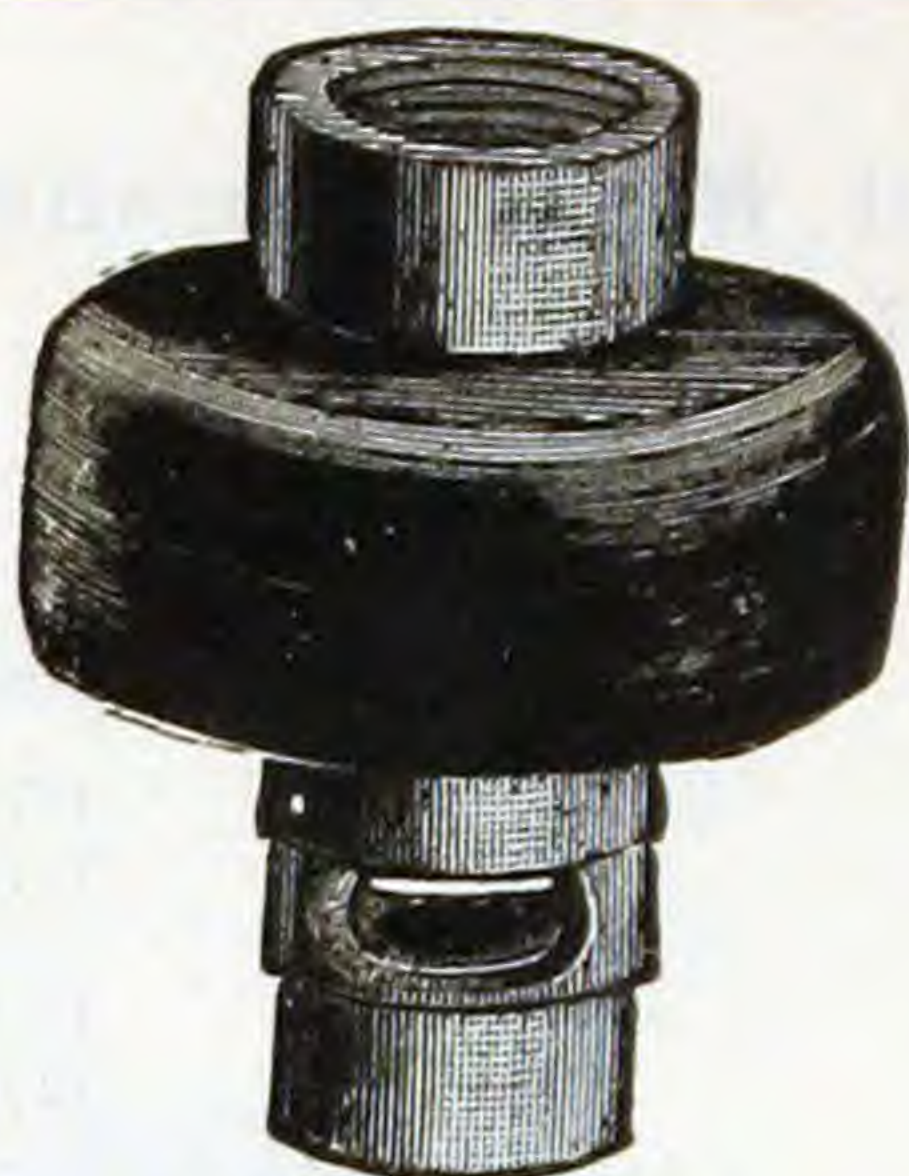
IN MALLEABLE IRON.

11805	$\frac{3}{8}$ x $\frac{1}{8}$	\$0.36	11811
11806	$\frac{3}{8}$ x $\frac{1}{4}$	.36	11812
11807	$\frac{3}{8}$ x $\frac{3}{8}$	.36	11813
11808	$\frac{1}{2}$ x $\frac{1}{8}$	.50	11814
11809	$\frac{1}{2}$ x $\frac{1}{4}$	.50	11815
11810	$\frac{1}{2}$ x $\frac{3}{8}$	.50	11816

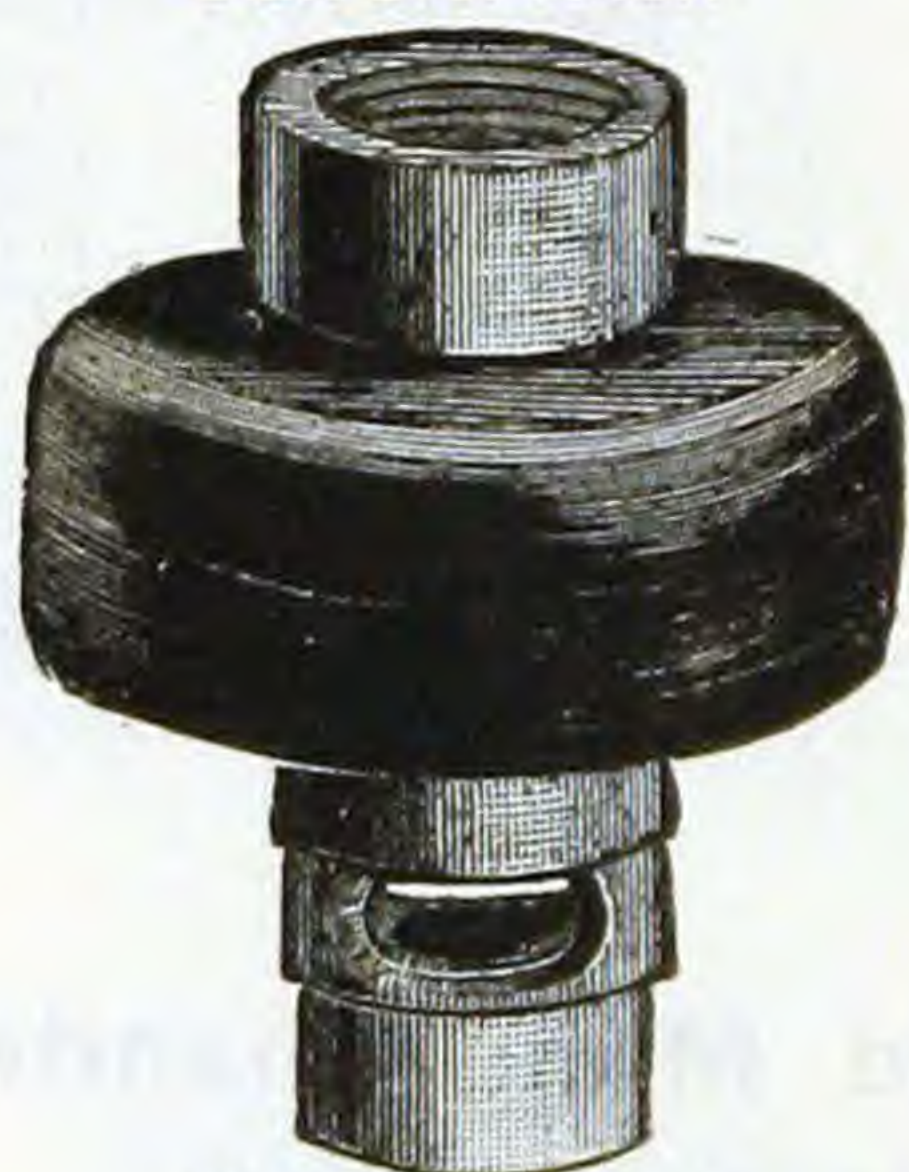


Cat. No. 11793.

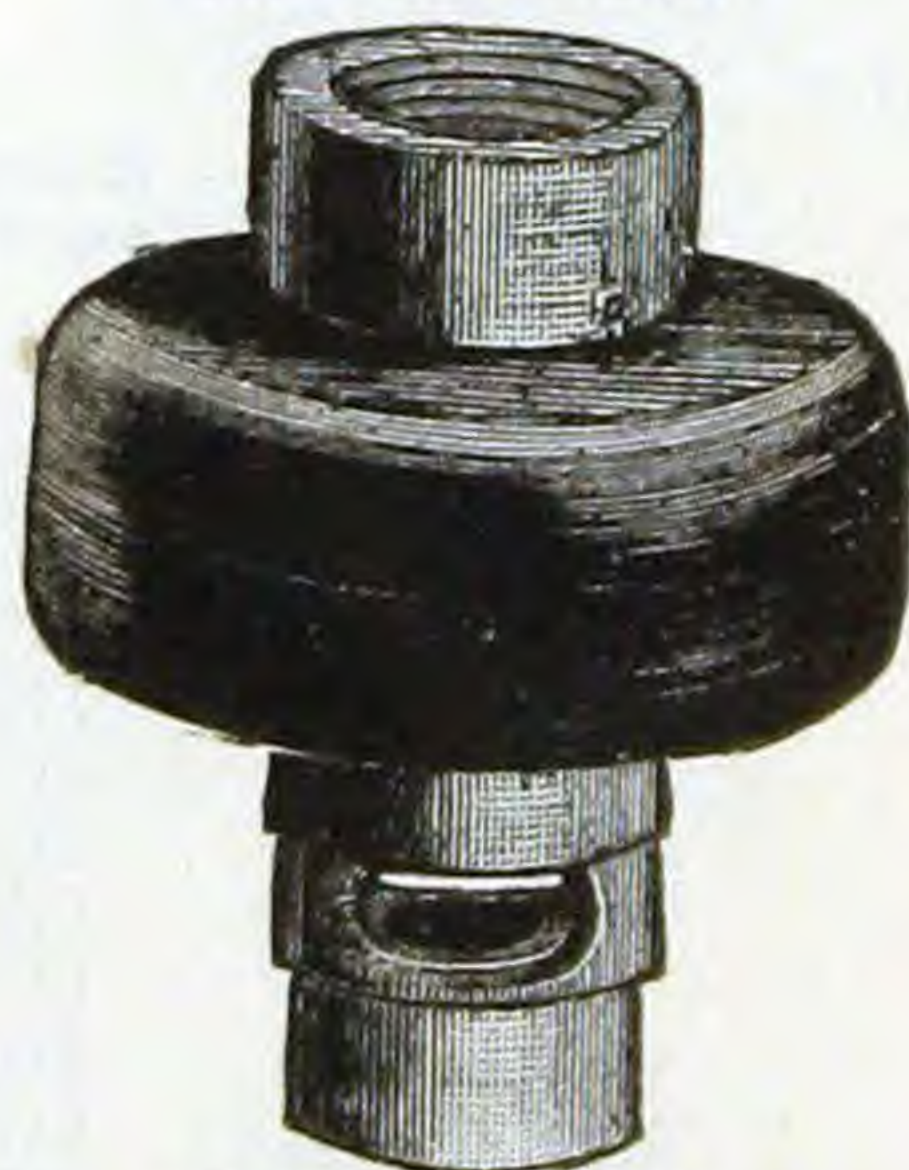




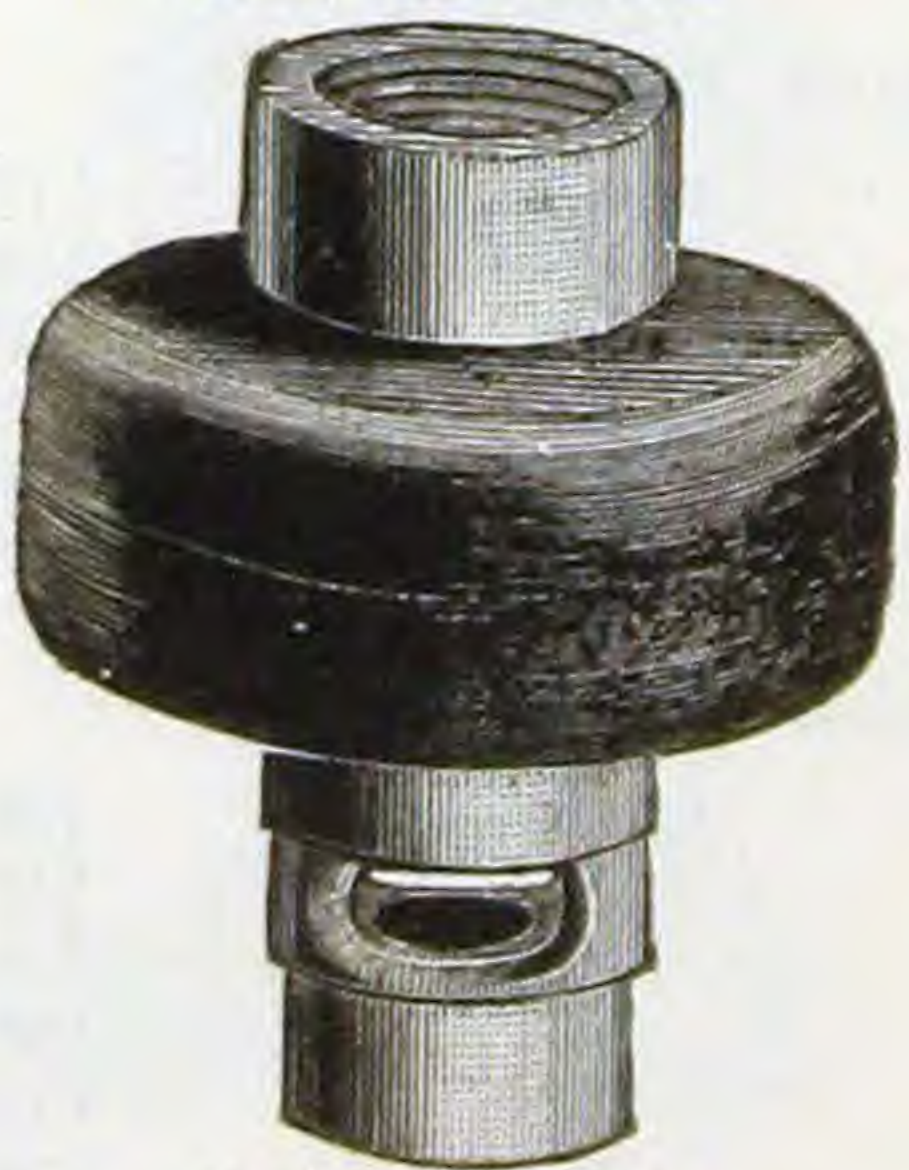
Cat. No. 11817.



Cat. No. 11828.



Cat. No. 11836.



Cat. No. 11844.

## The Macallen Solid Mica Chandelier Joints.

IN COMPOSITION BRASS.

Cat. No.	Size.	Price.	Cat. No.	Size.	Price.
11817	$\frac{3}{8} \times \frac{1}{8}$	\$0.60	11822	$\frac{1}{2} \times \frac{3}{8}$	\$0.80
11818	$\frac{3}{8} \times \frac{1}{4}$	.60	11823	$\frac{1}{2} \times \frac{1}{2}$	.80
11819	$\frac{3}{8} \times \frac{3}{8}$	.60	11824	$\frac{3}{4} \times \frac{1}{2}$	1.20
11820	$\frac{1}{2} \times \frac{1}{8}$	.80	11825	$\frac{3}{4} \times \frac{3}{4}$	1.20
11821	$\frac{1}{2} \times \frac{1}{4}$	.80			

Larger sizes made to order at special prices.

BRACKET SIZES.

11826	$\frac{3}{8} \times \frac{1}{8}$	.50	11827	$\frac{3}{8} \times \frac{1}{4}$	.50
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## The Macallen Solid Mica Electrolier or Separable Joints.

IN MALLEABLE IRON.

11828	$\frac{3}{8} \times \frac{1}{8}$	\$0.50	11831	$\frac{1}{2} \times \frac{1}{8}$	\$0.66 $\frac{2}{3}$
11829	$\frac{3}{8} \times \frac{1}{4}$	.50	11832	$\frac{1}{2} \times \frac{1}{4}$	.66 $\frac{2}{3}$
11830	$\frac{3}{8} \times \frac{3}{8}$	.50	11833	$\frac{1}{2} \times \frac{3}{8}$	.66 $\frac{2}{3}$

BRACKET SIZES.

11834	$\frac{3}{8} \times \frac{1}{8}$	.45	11835	$\frac{3}{8} \times \frac{1}{4}$	.45
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## The Macallen Solid Mica Electrolier or Separable Joints.

IN COMPOSITION BRASS.

11836	$\frac{3}{8} \times \frac{1}{8}$	\$0.60	11839	$\frac{1}{2} \times \frac{1}{8}$	\$0.80
11837	$\frac{3}{8} \times \frac{1}{4}$	.60	11840	$\frac{1}{2} \times \frac{1}{4}$	.80
11838	$\frac{3}{8} \times \frac{3}{8}$	.60	11841	$\frac{1}{2} \times \frac{3}{8}$	.80

BRACKET SIZES.

In Composition Brass.

11842	$\frac{3}{8} \times \frac{1}{8}$	.50	11843	$\frac{3}{8} \times \frac{1}{4}$	.50
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## The Macallen Solid Mica Electrolier or Separable Joints.

IN MALLEABLE IRON.

11844	$\frac{3}{8} \times \frac{1}{8}$	\$0.50	11847	$\frac{1}{2} \times \frac{1}{8}$	\$0.66 $\frac{2}{3}$
11845	$\frac{3}{8} \times \frac{1}{4}$	.50	11848	$\frac{1}{2} \times \frac{1}{4}$	.66 $\frac{2}{3}$
11846	$\frac{3}{8} \times \frac{3}{8}$	.50	11849	$\frac{1}{2} \times \frac{3}{8}$	.66 $\frac{2}{3}$

BRACKET SIZES.

In Malleable Iron.

11850	$\frac{3}{8} \times \frac{1}{8}$	.45	11851	$\frac{3}{8} \times \frac{1}{4}$	.45
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## LAMP GUARDS AND HANDLES.

### Wire Guards.



Cat. No. 11852.

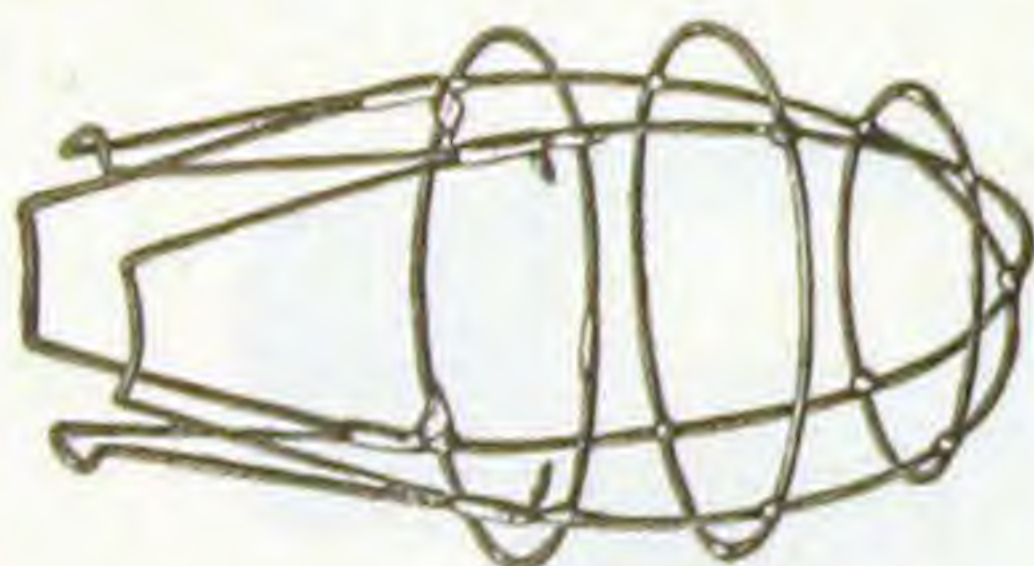
Cat. No.	Price.
11852 Polished Brass, per dozen .....	\$2.75
11853 Tinned, per dozen.....	2.50



Cat. No. 11854.

11854 Tinned, per dozen. ....	2.75
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For 3¼ inch Holder only.



Cat. No. 11855.

11855 Polished Brass, per dozen.....	3 00
11856 Tinned, per dozen.....	2.50



Cat. No. 11858.

11857 Galvanized Iron, heavy, each.....	.30
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For 3¼ inch Holder only.

11858 Galvanized, heavy, with Loop for 3¼ in. holder only.....	.40
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Cat. No. 11859.

11859 Guard, complete, with Handle, Hook and Holder, each .....	1.00
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Cat. No. 11860.

### Socket Handle

Cat. No.	Price.
11860 Handle, with Hook, each, \$0.50	





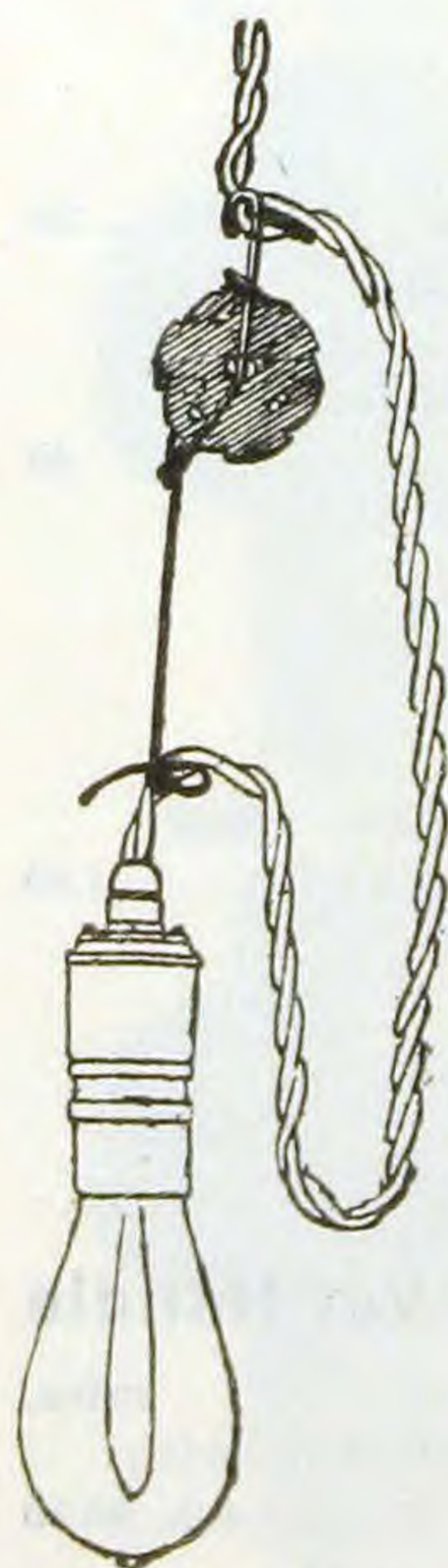
### Dow Adjuster.

For Electric Light Pendants.



Cat. No. 11861.

Cat. No.	Price.
11861 Nickel-plated, per dozen .....	\$25.50
11862 Bronze, per dozen .....	22.95
11863 Gilt, per dozen .....	22.95



Cat. No. 11864.

### Standard Incandescent Lamp Adjuster.

Adjusts from 0 to 6 feet.

Holds the lamp securely at any point. Has no complicated parts to give out. It is not controlled by weight or friction, but by a simple and perfect-working double-catch that will hold any weight of lamp or shade.

It is perfectly insulated.

It is attached to the electric cord by insulating fibre, and can be put on by anyone in half a minute.

It is the cheapest automatic adjuster on the market.

Recommended by electricians and boards of underwriters.

Used in large quantities at factories, stores and shops, to save time in adjusting, and to prevent breakage of lamps.

Cat. No.	Price.
11864 Per hundred .....	\$30.00





Cat. No. 11866.

Cat. No. 11868.

**Socket Bushings.**

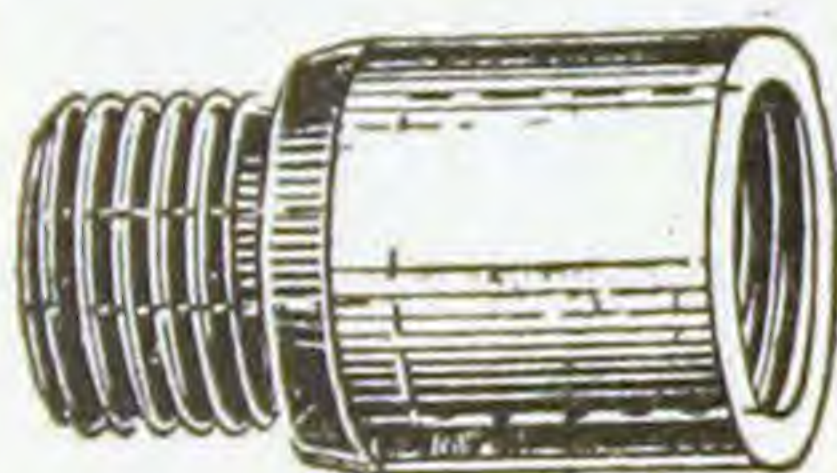
Cat. No.		Price.
11865	Genuine Hard Rubber, $\frac{1}{8}$ in., per 1000,	\$25.00
11866	Composition, $\frac{1}{8}$ in.....	15.00
11867	Genuine Hard Rubber, $\frac{1}{8}$ in.	27.50
11868	Composition, $\frac{1}{8}$ in.....	18.00



Cat. No. 11869.

Cat. No. 11870.

11869	Soft Rubber.....	per 1000,	15.00
11870	Genuine Hard Rubber, $\frac{3}{8}$ in.	"	150.00



Cat. No. 11871.

11871	Polished Brass and Hard Rubber Fixture Bushing.....	each,	.25
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Cat. No. 11873.

**Cord Adjusters.**

11873	Ball Cord Adjuster, stained cherry, per 1000.....	15.00
11874	Ball Cord Adjuster, enameled, per 1000.....	15.00
11875	Ball Cord Adjuster, enameled, with screw eyes, per 1000 pairs.....	50.00



Cat. No. 11876.

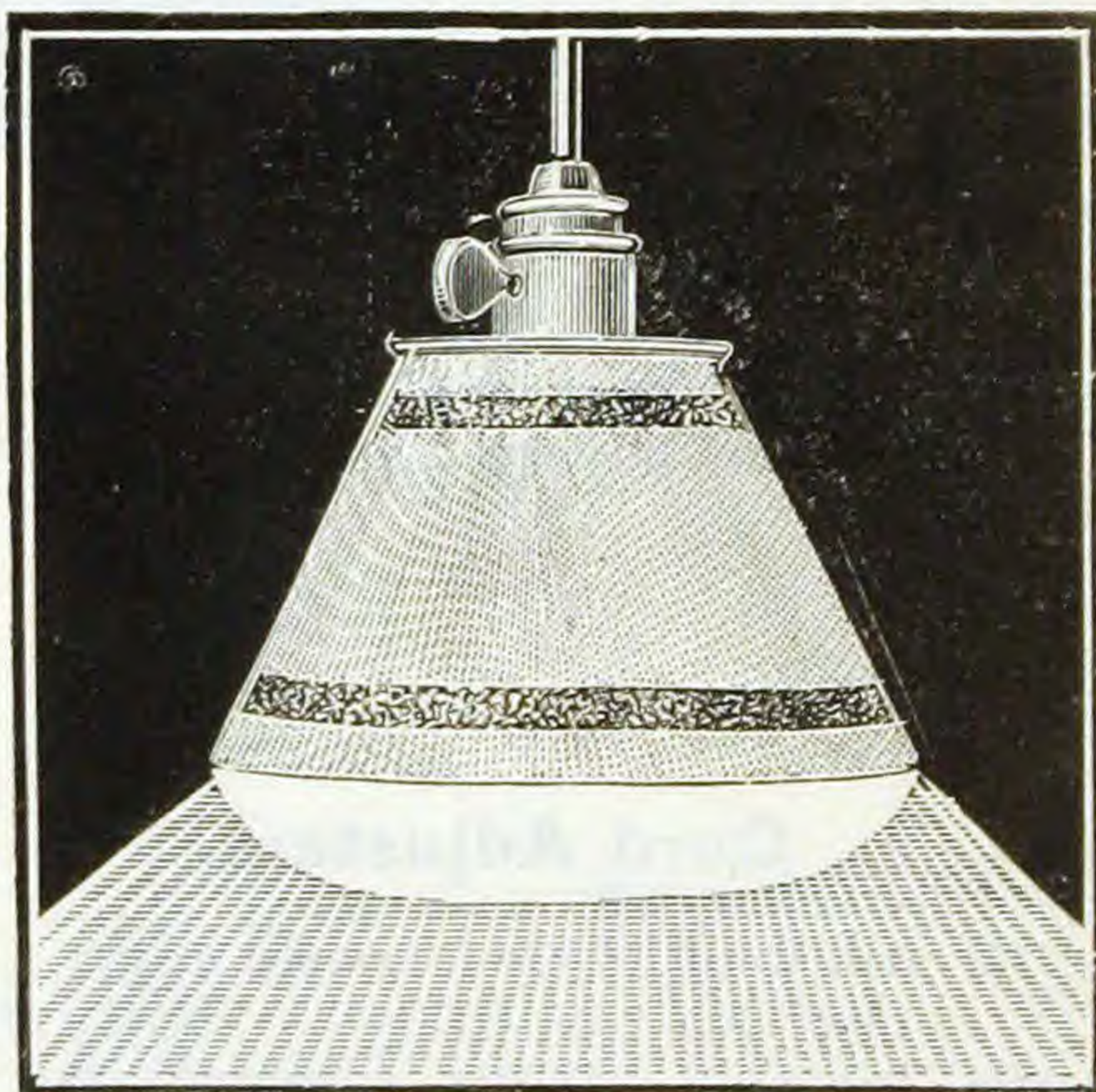
11876	Bar Cord Adjuster.....	per 1000,	15.00
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Cat. No. 11877.

11877	"Q and S" Cord Adjuster.....	each,	.02
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Cat. No. 11878.

## ELECTRIC LIGHT SHADES.

**McCreary Reflector Shade.**

Cat. No.	Price.
11878 Seven inch Shade; size of opening at top $2\frac{3}{4}$ inches; requires a $3\frac{1}{4}$ inch holder; will take a 16, 20 or 25 C. P. Lamp, per doz.....	\$18.00
11879 Eight inch Shade; size of opening at top $2\frac{3}{4}$ inches; requires a $3\frac{1}{4}$ inch holder; will take a 16, 20 or 25 C. P. Lamp, per doz.....	21.00
11880 Nine inch Shade; size of opening at top $3\frac{1}{4}$ inches; requires a 4 inch holder; will take a 32 C. P. Lamp, per doz.....	33.00
11881 Twelve inch Shade; size of opening at top $3\frac{1}{4}$ inches; requires a 4 inch holder; will take a 50 C. P. Lamp, per doz.....	51.00

In ordering state kind of lamp to be used and candle power.

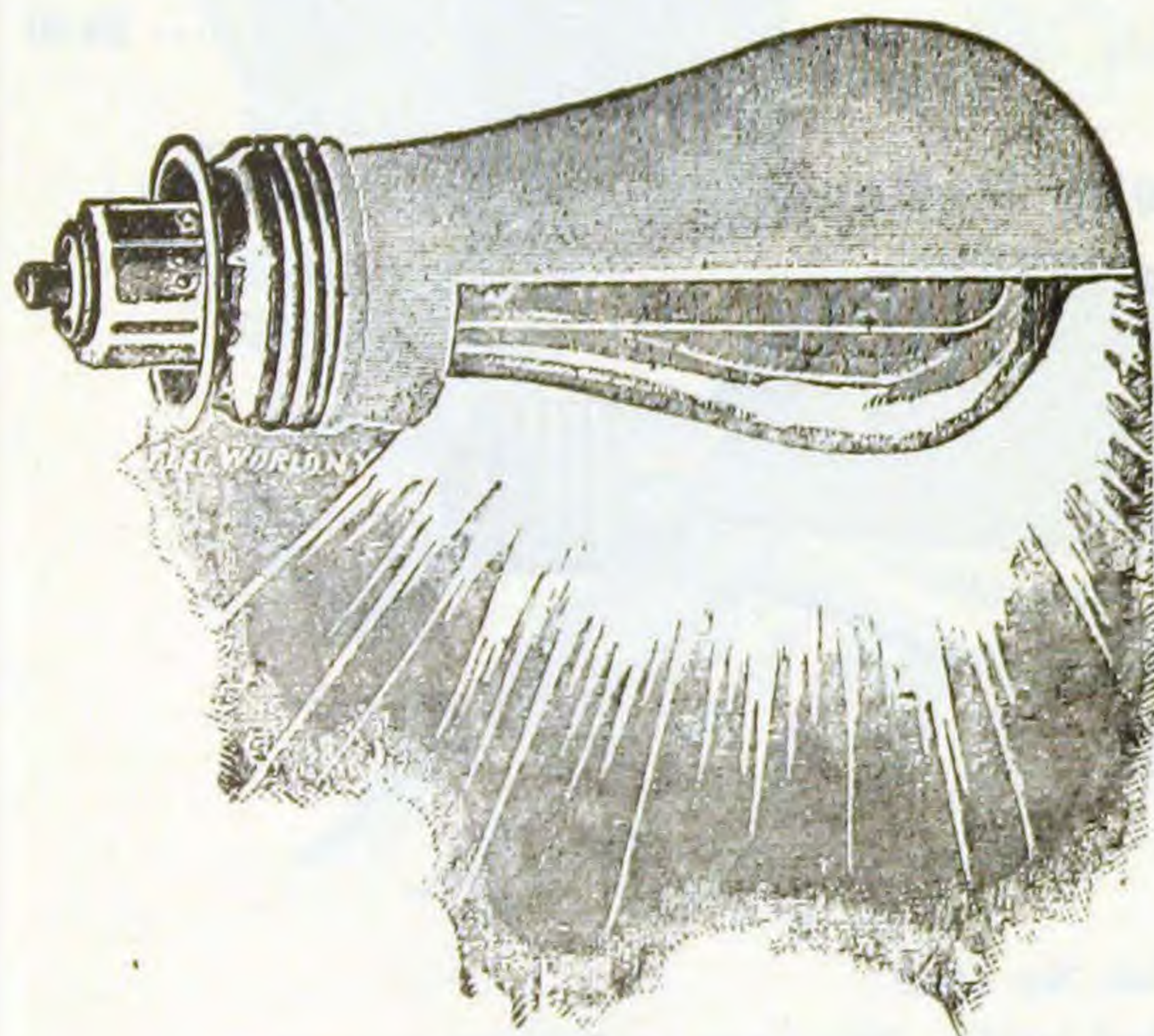
Can be furnished in green glass.



## ELECTRIC LIGHT SHADES.

**McCreary Half Re-  
flector Shade.**

For 16 C. P. Lamps.



Cat. No. 11882.

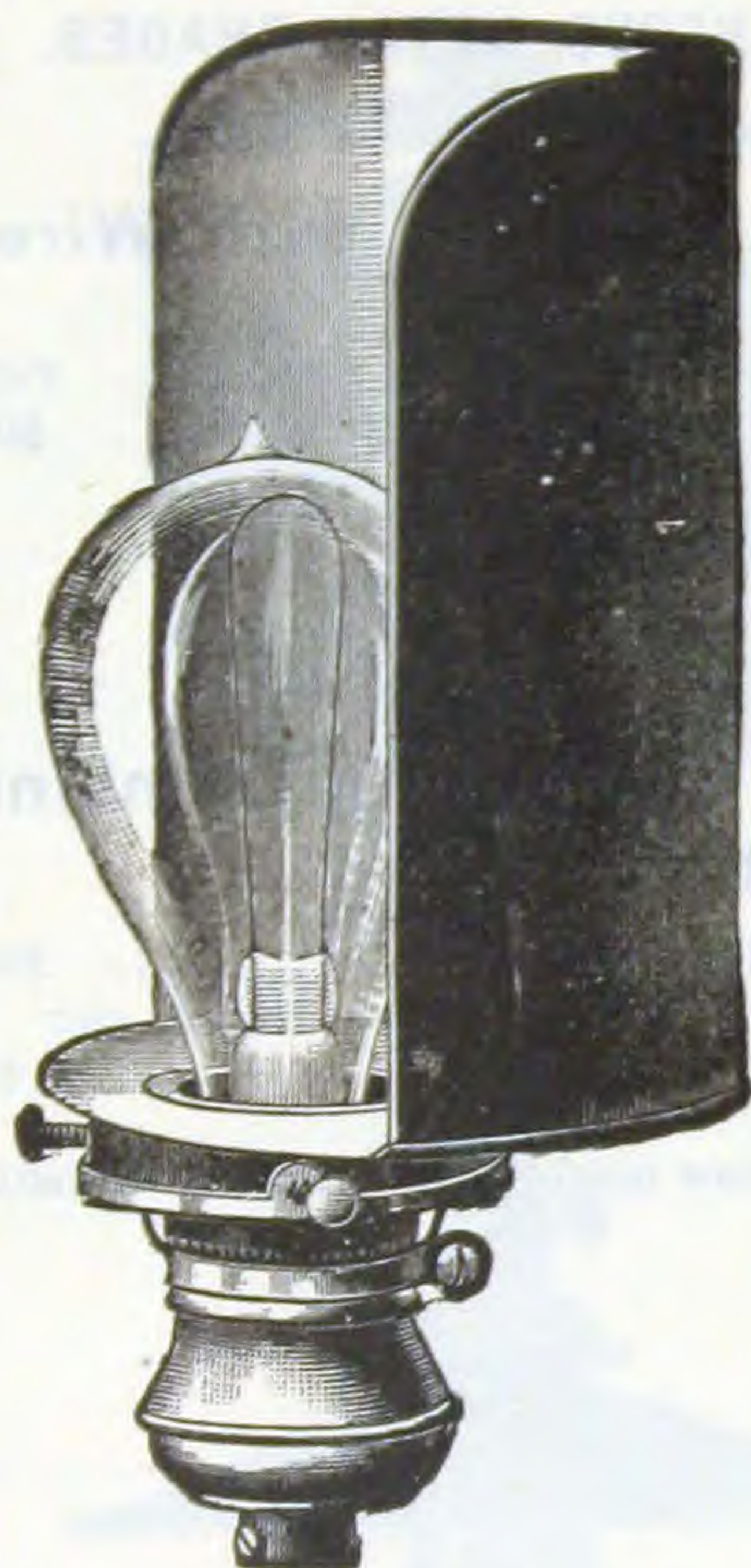
Cat. No.		Price. per doz.
11882	Aluminum, green outside, polished inside..	\$8.00
11883	Silvered outside.....	8.00
11884	Tin, green outside, white inside.....	5.00
11885	Imported Porcelain, green outside, white inside.....	12.00

We have just added this excellent shade to our variety of half-shades. It is especially adapted to billiard lamps and reading lights.







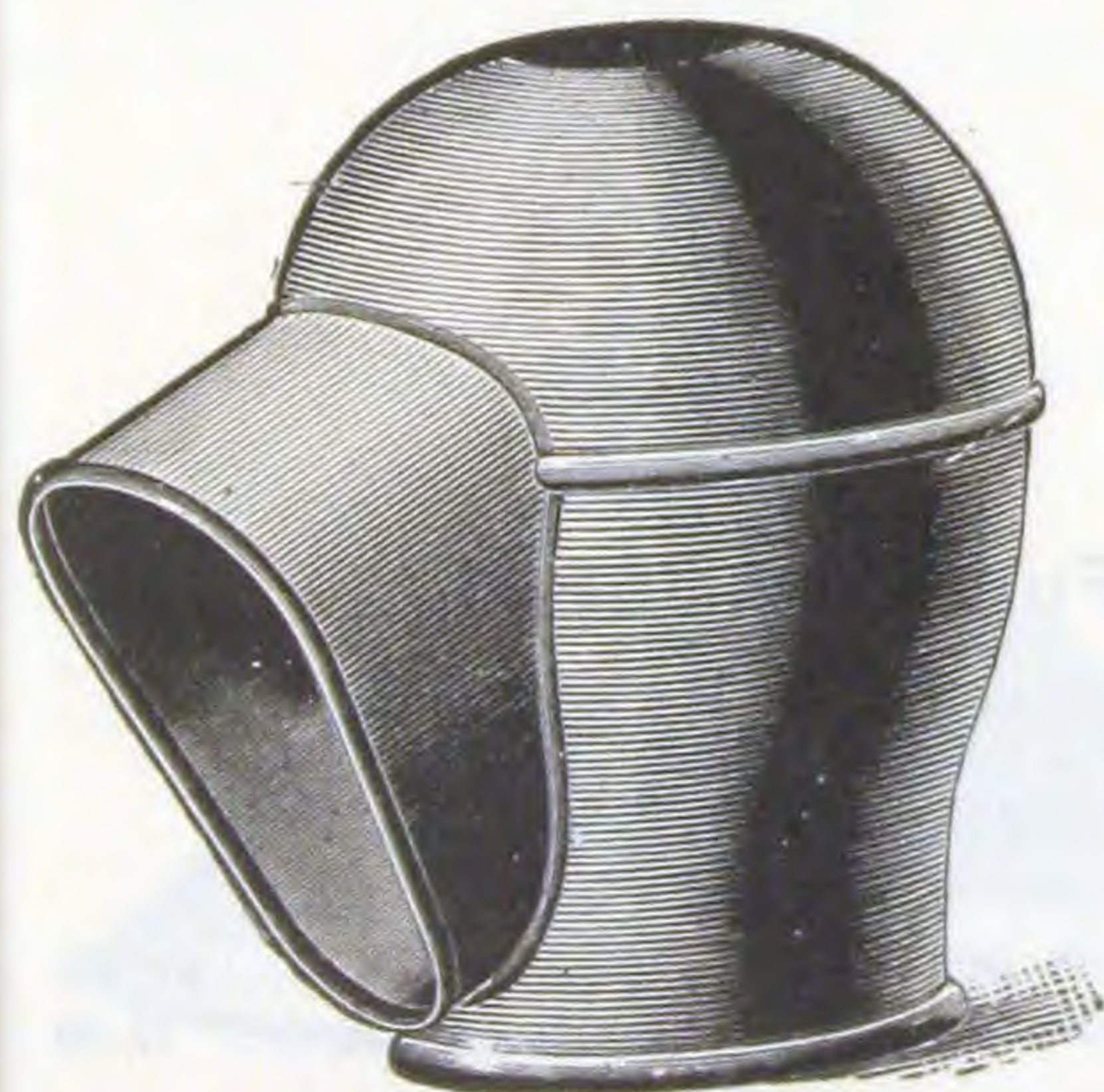


Cat. No. 11890.

### Foot-light Reflector.

Green outside, Bright Tin inside.

Cat. No.	Price.
11890 For 2 $\frac{1}{4}$ inch Holder, per doz.....	\$6.00



Cat. No. 11891.

### Pulpit Hood.

Bronze outside, White Enamel inside.

Cat. No.	Price.
11891 For 3 $\frac{1}{4}$ inch Holder, each.....	\$3.00





Cat. No. 11892.

**MISCELLANEOUS METAL SHADES.****Metal Half Shades with Wire Guard.**

Cat. No.	Price.
11892 Japanned Green outside, each..	.....\$0.60



Cat. No. 11893.

**Metal Half Shade with Combination Holder.**

11893 Japanned Green, per doz.....	\$6.50
11894 " " with Wire Guard, per doz.....	7.75

Only one set-screw used. Saves time in adjusting socket.



Cat. No. 11895.

**Metal Half Shades.**

11895 Japanned Green outside, White Enamel inside, each.....	\$0.40
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Cat. No. 11896.

**Full Cone Shade.**

Green Glass, Opal Lined.

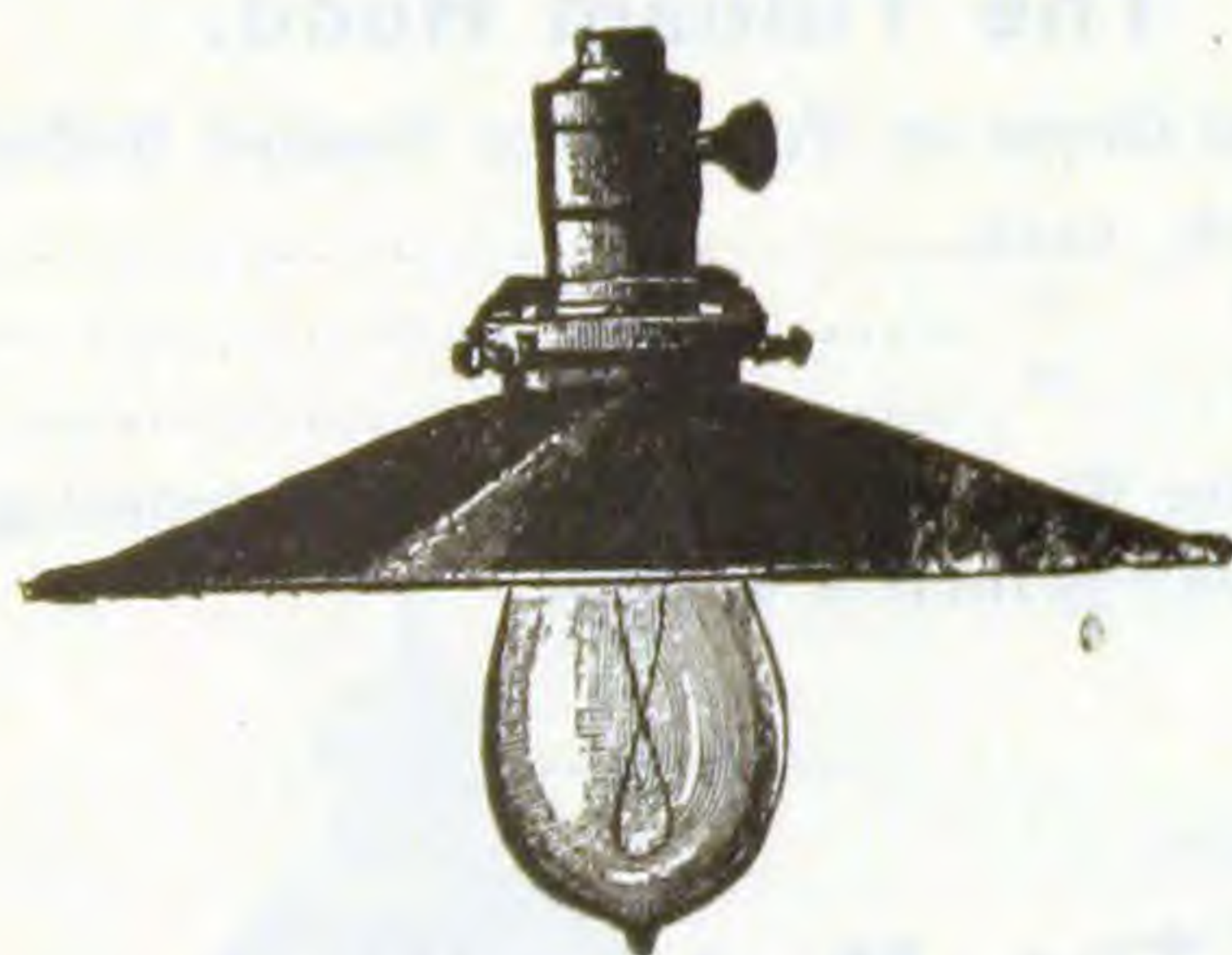
For 2¼ and 3¼-inch Holders.

11896 7 inches, per doz ..	\$10.00
11897 10 " " ..	15.00





Cat. No. 11898.



Cat. No. 11906.



Cat. No. 11907.

**METAL SHADES AND REFLECTORS****Flat Tin Shades.**

Cat. No.	Price per doz.
11898 6 in., Japanned Green outside, Enameled White inside.....	\$1 75
11899 7 in., Japanned Green outside, Enameled White inside. ....	1.75
11900 8 in., Japanned Green outside, Enameled White inside.....	1.75
11901 10 in., Japanned Green outside, Enameled White inside.....	2.25
11902 12 in., Japanned Green outside, Enameled White inside.....	3.25
11903 14 in., Japanned Green outside, Enameled White inside.....	3.75
11904 16 in., Japanned Green outside, Enameled White inside.....	5.00
11905 18 in., Japanned Green outside, Enameled White inside .....	6.00

Fitted for  $2\frac{1}{4}$  in. and  $3\frac{1}{4}$  in. holders, and Edison holder. Other sizes to order.

Any of the above shades fitted with  $\frac{3}{8} \times \frac{5}{8}$  in. pipe connections for bracket work at 10 cents each, net, extra.

**Half Deep Tin Shades.**

Similar to No. 11898 but a little deeper.

	Per doz.
11906 8 in., Japanned Green outside, Enameled White inside.....	\$1.75
11907 10 in., Japanned Green outside, Enameled White inside .....	2.25
11908 12 in., Japanned Green outside, Enameled White inside.....	3.25
11909 14 in., Japanned Green outside, Enameled White inside.....	3.75
11910 16 in., Japanned Green outside, Enameled White inside.....	5 00
11911 18 in., Japanned Green outside, Enameled White inside .....	6.00

Fitted for  $2\frac{1}{4}$  in. and  $3\frac{1}{4}$  in. holders, and Edison holder. Other sizes to order.

We can also furnish any of the above Japanned White Enamel both sides.

**Cone Tin Shades.**

	Per doz.
11912 8 in., Japanned Green outside, Enameled White inside.....	\$3.25
11913 10 in., Japanned Green outside, Enameled White inside.....	3.75
11914 12 in., Japanned Green outside, Enameled White inside.....	4.50

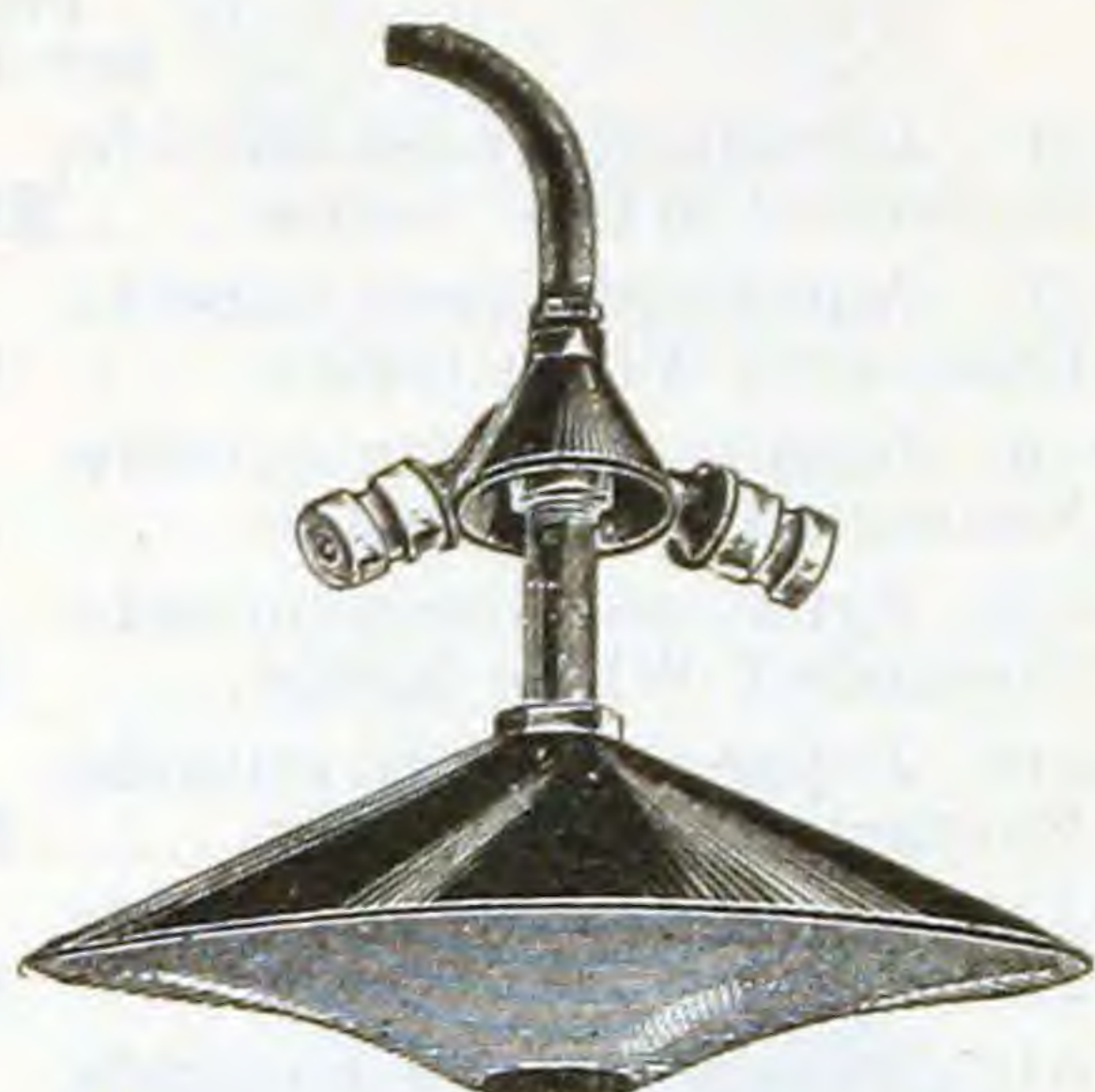
Fitted for  $2\frac{1}{4}$  in. and  $3\frac{1}{4}$  in. holders. Other sizes to order.



## METAL HOODS.

### The New Suburban Hood.

This fixture excels in simplicity of construction. The iron canopy is made with slots to take wires, and line-men can easily and quickly adjust the hoods by this method, thus saving vexatious delays. Any size Hoods made to order at small advance.



Cat. No. 11915.

Cat. No.	Price.
11915 Each.....	\$3.00

Price includes Bracket.

### The Tidnam Hood.

Japanned Green on Top, White Enamel Reflector.



Cat. No. 11916.

11916 16 inch, each.....	1.60
11917 18 " " .....	2.25
11918 20 " " .....	2.50

Adapted for Weather-proof Globe. In ordering, state size of socket— $\frac{1}{8}$  inch or  $\frac{3}{8}$  inch.

### The Marten Hood.

All Parts Interchangeable.



Cat. No. 11919

11919 16 inch, each.....	2.00
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Socket protected by the Reflector, the Lamp only being exposed.

### The Chapin Hood.



Cat. No. 11920.

11920 16 inch, each.....	1.25
--------------------------	------

Socket protected by the reflector, the Lamp only being exposed.

### The Columbian Hood.



Cat. No. 11921.

11921 18 inch, each.....	1.50
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Socket protected by the Reflector, the Lamp only being exposed.



SHADES.

Celluloid and Cardboard.



Cat. No. 11922.

Cat. No.	Diam.		Price per doz.
11922	10 inch,	Cardboard.....	\$2.67
11923	10 "	Celluloid, green, white lined.....	10.40



Cat. No. 11924.

11924	8 inch,	Cardboard.....	2.40
11925	8 "	Celluloid, assorted colors.....	6.40
11926	8 "	" green, white lined.....	9.60
11927	8 "	" " " " " ".....	10.40



Cat. No. 11928.

11928	10 inch,	Cardboard.....	2.67
11929	10 "	Celluloid, assorted colors.....	6.67
11930	10 "	" green, white lined.....	10.67
11931	10 "	" " " " " ".....	11.33

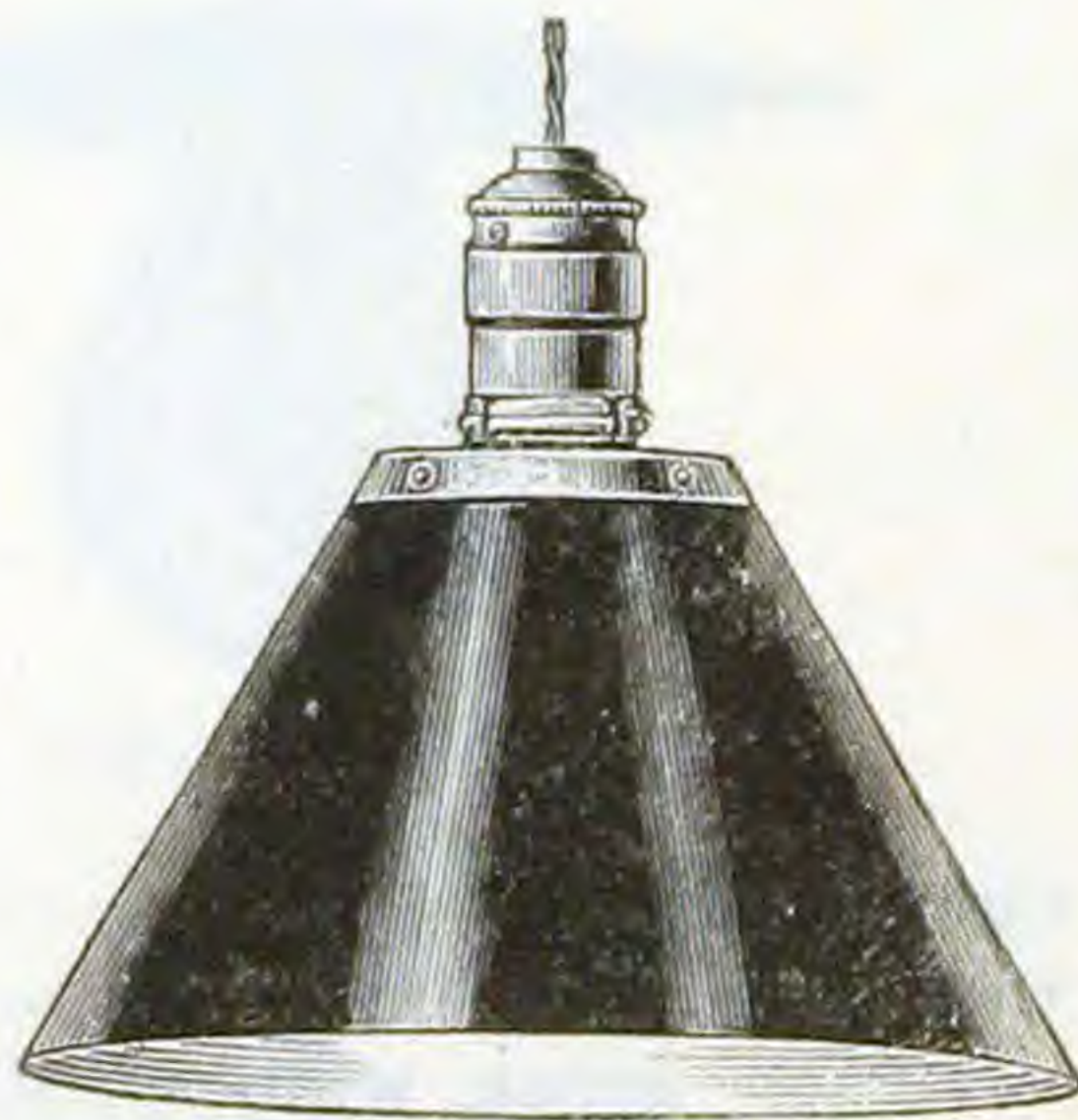




Cat. No. 11932.

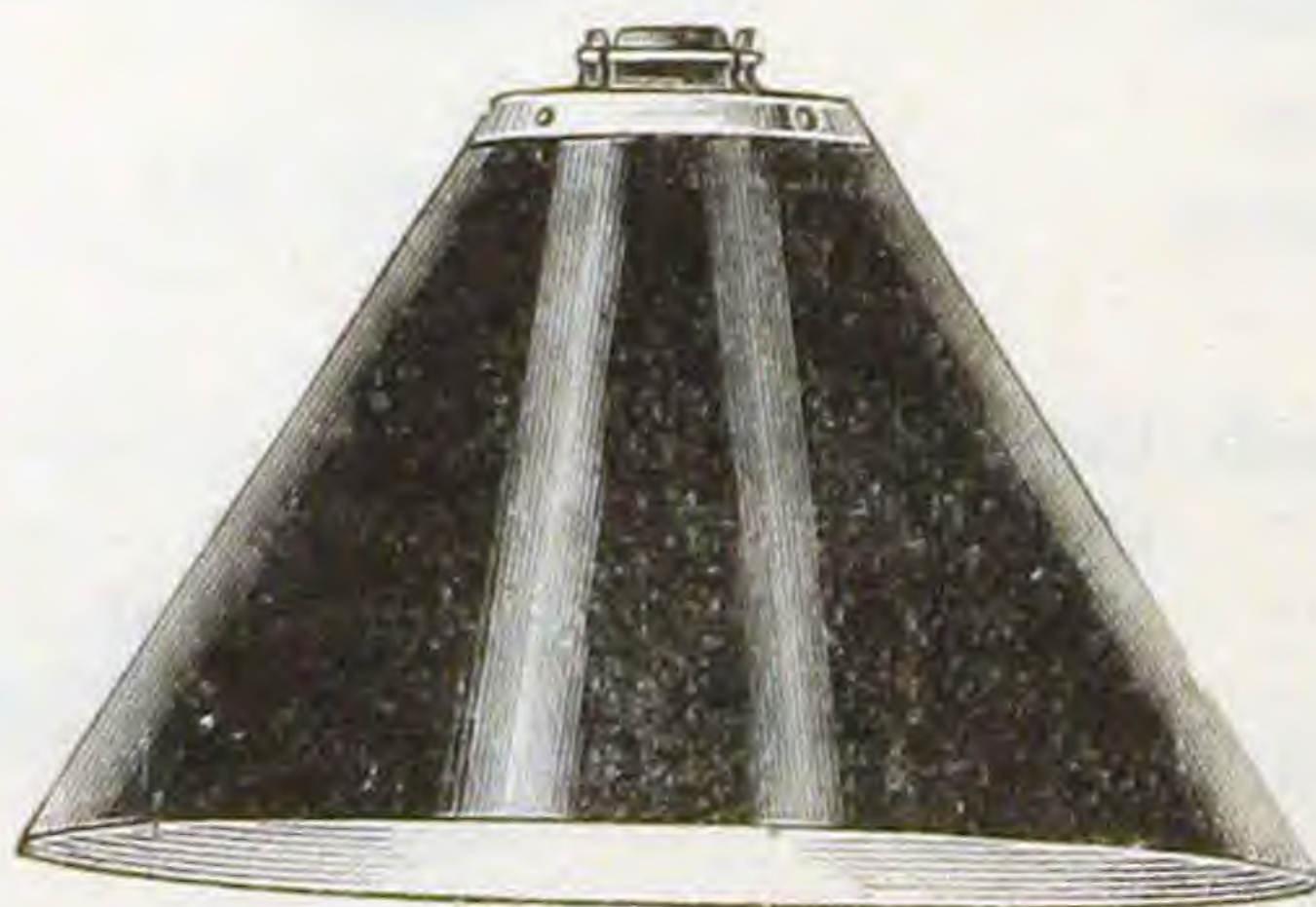
### Shades—Celluloid and Cardboard.

Cat. No.		Price per doz.
11932	11 inch, Celluloid, green, white lined.....	\$13.33
11933	11 inch, Celluloid, green, white lined.....	14.67
11934	12 inch, Cardboard.....	4.00
11935	12 inch, Celluloid, green, white lined.....	17.33
11936	12 inch, Celluloid, green, white, lined.....	18.66



Cat. No. 11937.

11937	8 inch, Cardboard.....	2.67
11938	8 inch, Celluloid, aluminum lined	8.00
11939	8 inch, Celluloid, green, white lined .....	10.00



Cat. No. 11940.

11940	10 inch, Cardboard.....	3.33
11941	10 inch, Celluloid, green, aluminum lined...	10.00
11942	10 inch Celluloid, green, white lined.....	13.33





Cat. No. 11943.

**Aluminum Reflectors.**

Polished Inside and Japanned Green  
Outside.

**CONE.**

Cat. No.					Price.
11943	8 in.,	for $2\frac{1}{4}$	holder,	each.....	\$0.90
11944	10	"	$2\frac{1}{4}$	" " " " .....	1.00



Cat. No. 11945.

**FLAT.**

11945	10 in.,	for $2\frac{1}{4}$	holder,	each.....	.85
11946	12	"	$2\frac{1}{4}$	" " " " .....	1.00
11947	14	"	$3\frac{1}{4}$	" " " " .....	1.20
11948	16	"	$3\frac{1}{4}$	" " " " .....	1.50
11949	18	"	$3\frac{1}{4}$	" " " " .....	2.00



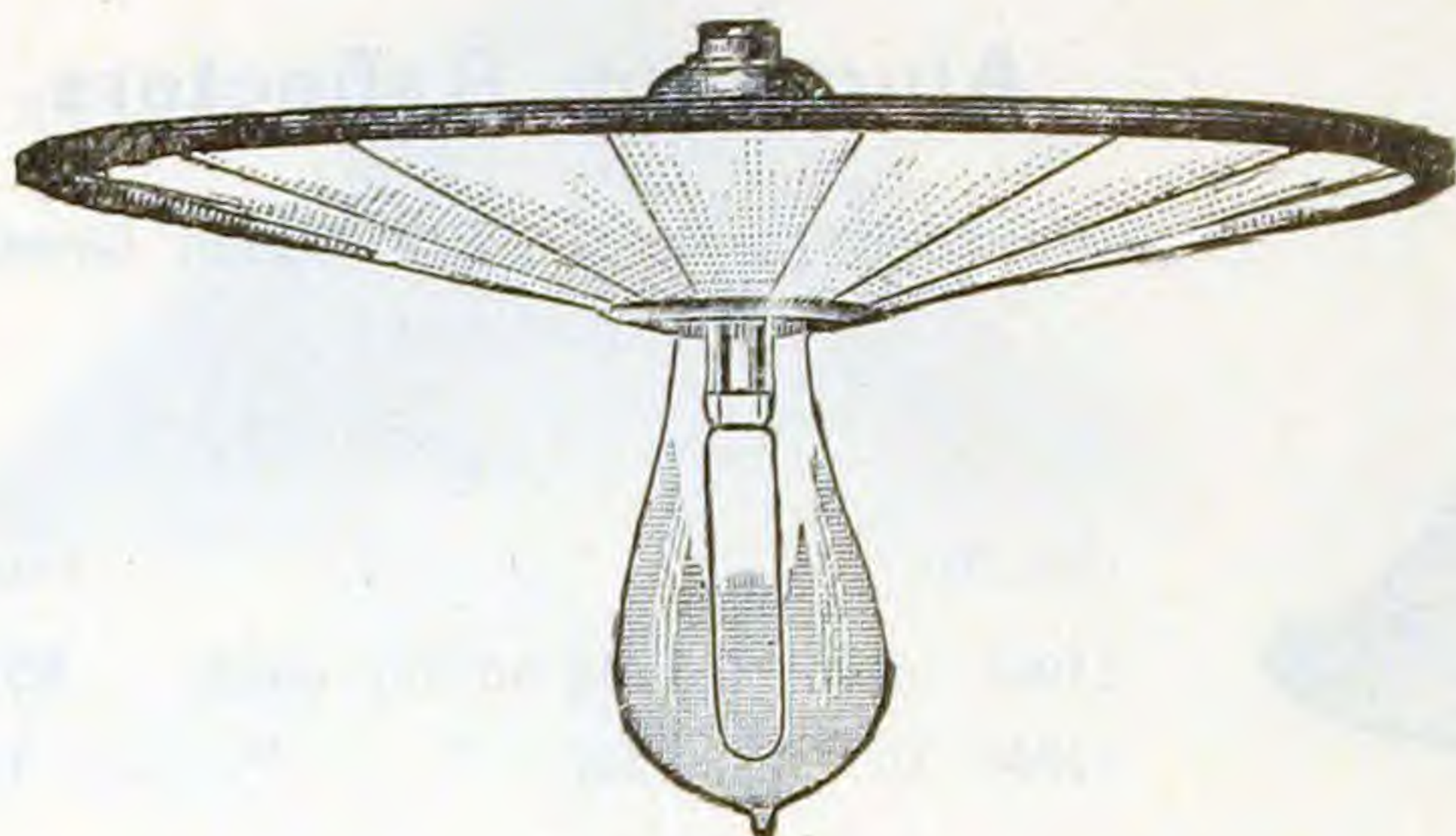
Cat. No. 11950.

**CONVEX.**

11950	10 in.,	for $2\frac{1}{4}$	holder,	each....	.85
11951	12	"	$2\frac{1}{4}$	" " " " .....	1.00
11952	14	"	$3\frac{1}{4}$	" " " " .....	1.20
11953	16	"	$3\frac{1}{4}$	" " " " .....	1.50
11954	18	"	$3\frac{1}{4}$	" " " " .....	2.00



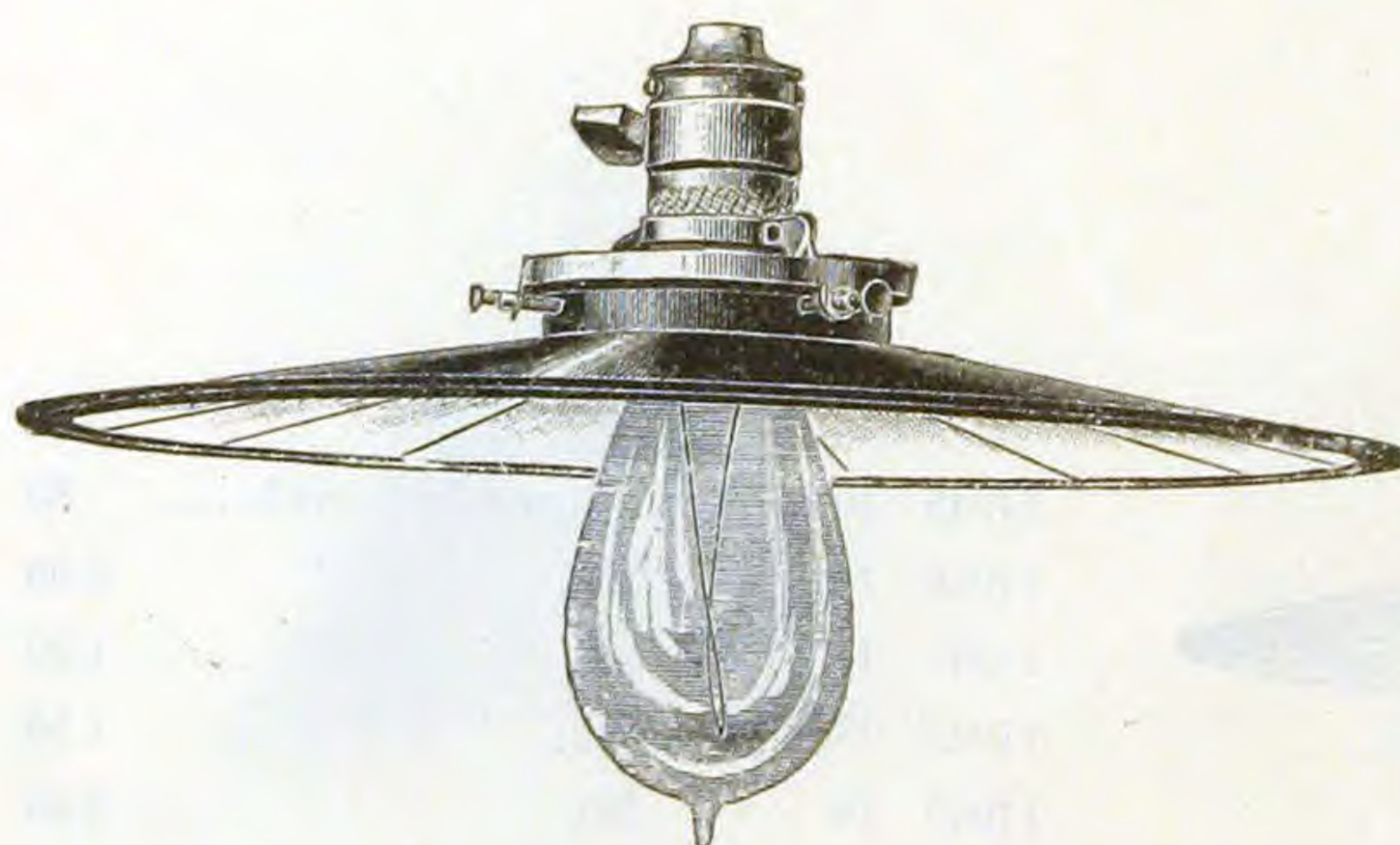
## MIRROR REFLECTOR SHADES.



Cat. No. 11955.

## Convex Mirror Reflector.

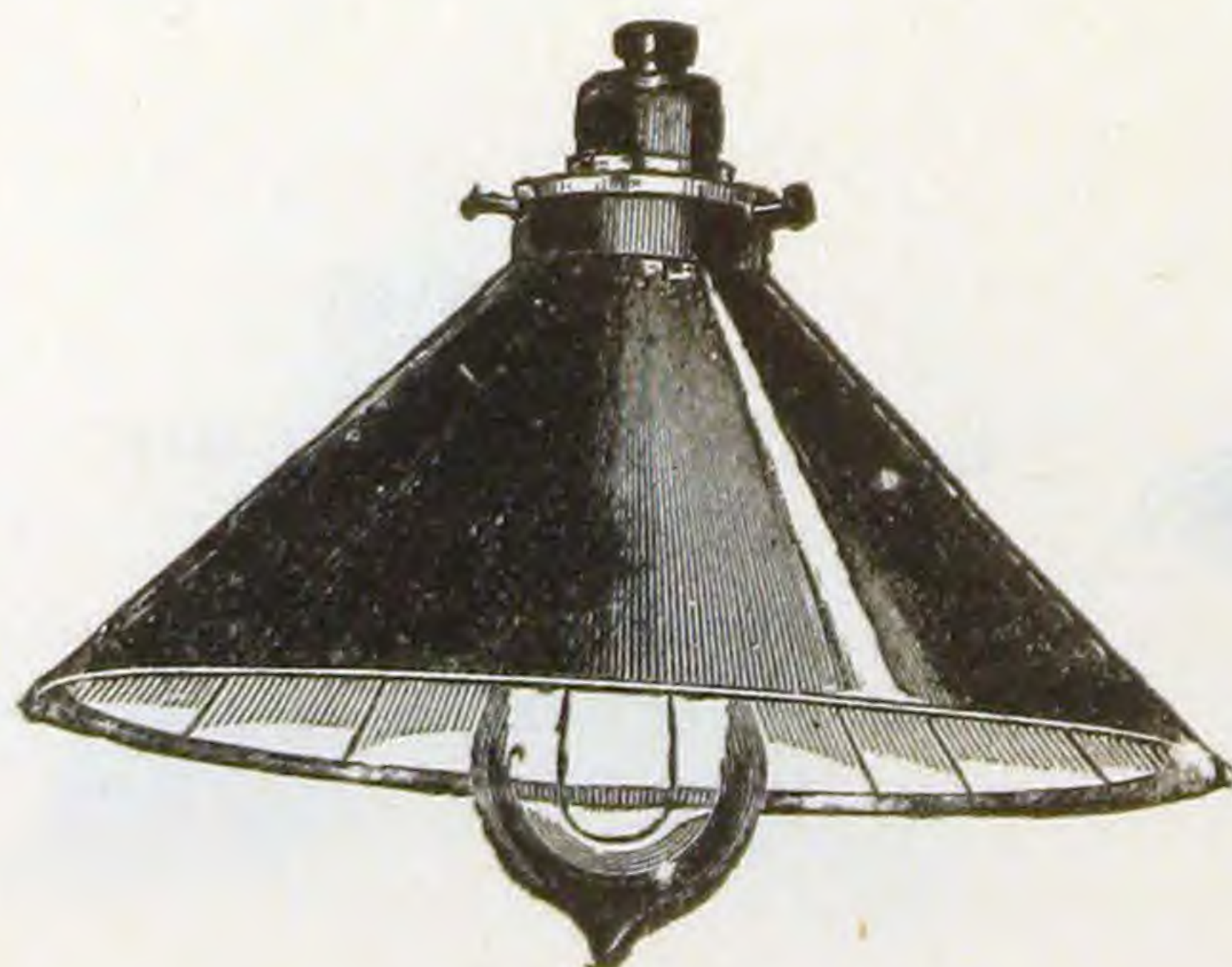
Cat. No.		Price.
11955	10 inches, each.....	\$1.75
11956	12    "    "    .....	2.00
11957	14    "    "    .....	2.25
11958	16    "    "    .....	2.85
11959	18    "    "    .....	3.60



Cat. No. 11960.

## Flat Mirror Reflector.

11960	10 inches, each.....	1.50
11961	12    "    "    .....	1.80
11962	14    "    "    .....	2.00
11963	16    "    "    .....	2.50
11964	18    "    "    .....	3.00



Cat. No. 11965

## Full Cone Mirror Reflector.

For 2¼ and 3¼-inch Holders.

11965	10 inches, each.....	1.80
11966	12    "    "    .....	2.00









Cat. No. 11992.

### Etched Glass Electric Shades.

Cat. No.	Price.
11992 Etched, scalloped top, per dozen.....	\$7.00
5¼ in. diam. 4 in. high. 2¼ in. holder.	



Cat. No. 11993.

11993 Etched, scalloped top, per dozen.....	7.00
5¼ in. diam. 4 in. high. 2¼ in. holder.	



Cat. No. 11994.

11994 Etched, fluted top, per dozen.....	6.75
6 in. diam. 3½ in. high. 2¼ in. holder.	



Cat. No. 11995.

11995 Etched Melon Pan, per dozen.....	8.00
5¼ in. diam. 4¼ in. high. 2½ in. holder.	





Cat. No. 11996.

## Etched Glass Electric Shades.

Cat. No.		Price.
11996	Etched, beaded top, per doz.....	\$9.00
	5 in. diam. 4 in. high. 2¼ in. holder.	



Cat. No. 11997.

11997	Etched, crimped, per doz.....	5.00
	5 in. diam. 4 in. high. 2¼ in. holder.	



Cat. No. 11998.

11998	Etched, scalloped top, per doz.....	7.50
	5 in. diam. 4 in. high. 2¼ in. holder.	



Cat. No 11999.

11999	Etched, scalloped top, per doz.....	7.50
	5¼ in. diam. 4 in. high. 2¼ in. holder.	





Cat. No. 12000.

### Etched Glass Electric Shades.

Cat. No.	Price.
12000 Etched Melon Pan, scalloped top, per doz.....	\$9.00

5¼ in. diam. 4 in. high. 2¼ in. holder.



Cat. No. 12001.

12001 Silver Etched, beveled edge, per doz.....	15.00
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5 in. diam. 4 in. high. 2¼ in. holder.



Cat. No. 12002.

12002 Silver Etched, scalloped top, per doz.....	14.00
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5 in. diam. 4 in. high. 2¼ in. holder.

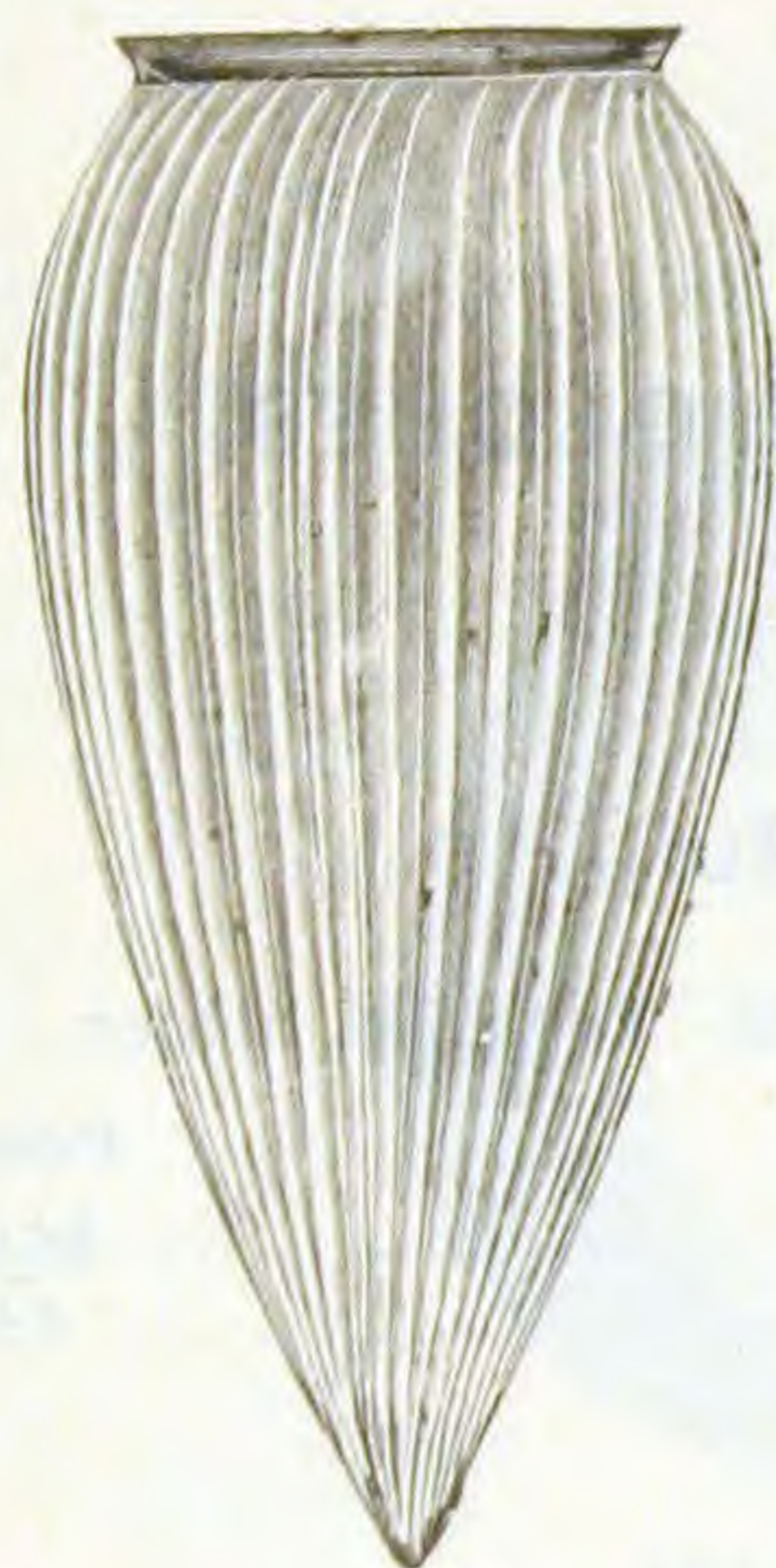


Cat. No. 12003.

12003 Silver Etched Crescent, scalloped top, per doz. ....	15.00
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5 in. diam. 3½ in. high. 2¼ in. holder.





Cat. No. 12004.

## STALACTITE GLOBES.

### Straight Rib Stalactite.

4 in. diameter,  $8\frac{1}{2}$  in. long.For  $3\frac{1}{4}$  in. holder.

Cat. No.	Price.
12004 Crystal, per dozen.....	\$12.00
12005 Opalescent, per dozen .....	13.00



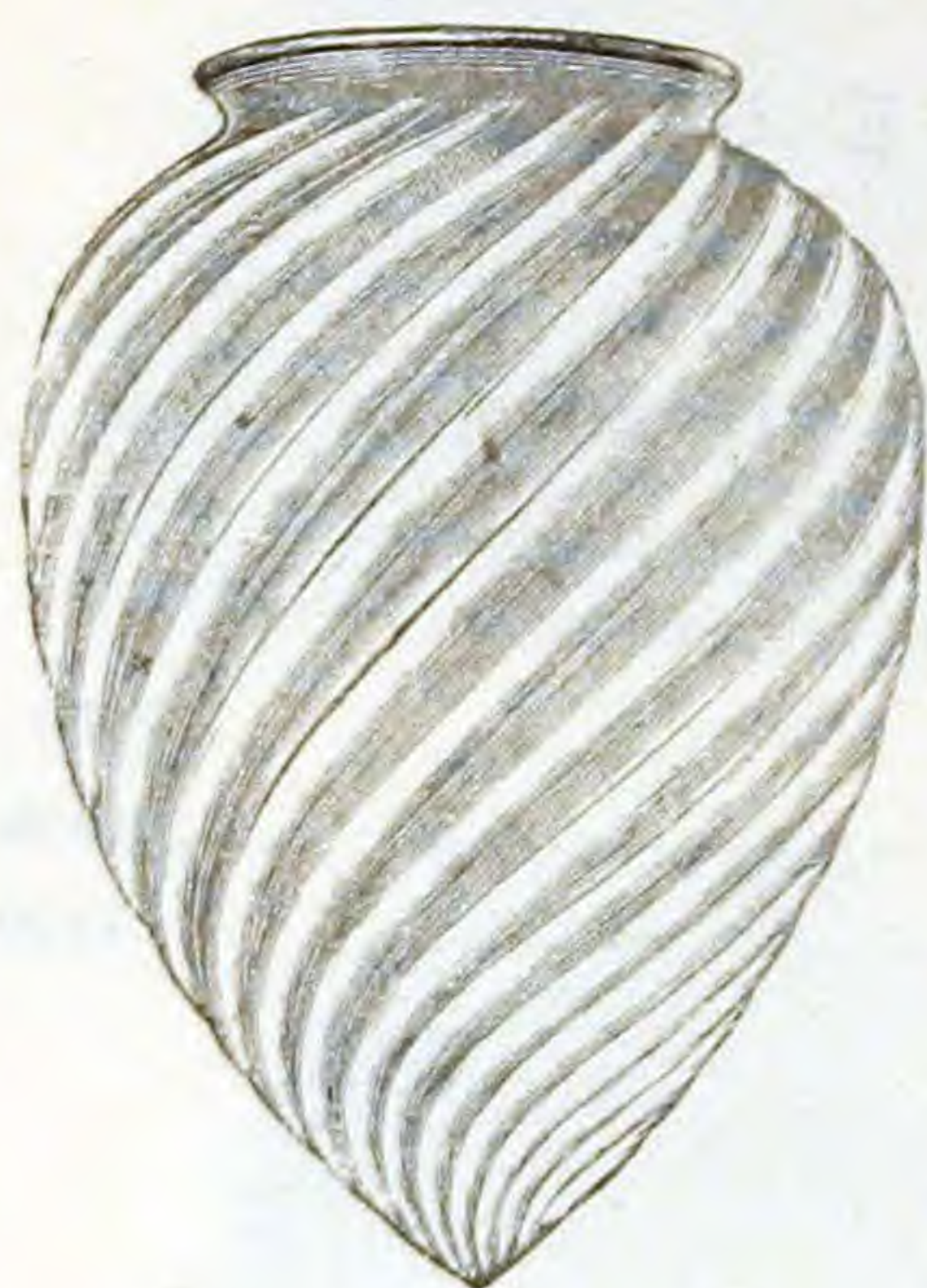
Cat. No. 12006.

### Straight Bulb.

4 in. diameter,  $6\frac{1}{2}$  in. long.For  $3\frac{1}{4}$  in. holder.

12006 Crystal, per dozen.....	5.50
12007 Opalescent, per dozen.....	6.00





Cat. No. 12008.

## STALACTITE GLOBES.

### Twist Bulb.

5½ in. diameter, 6½ in. long. For 3¼-in. holder.

Cat. No.		Price.
12008	Crystal, per doz.....	\$6.00
12009	Opalescent, per doz .....	6.50



Cat. No. 12010.

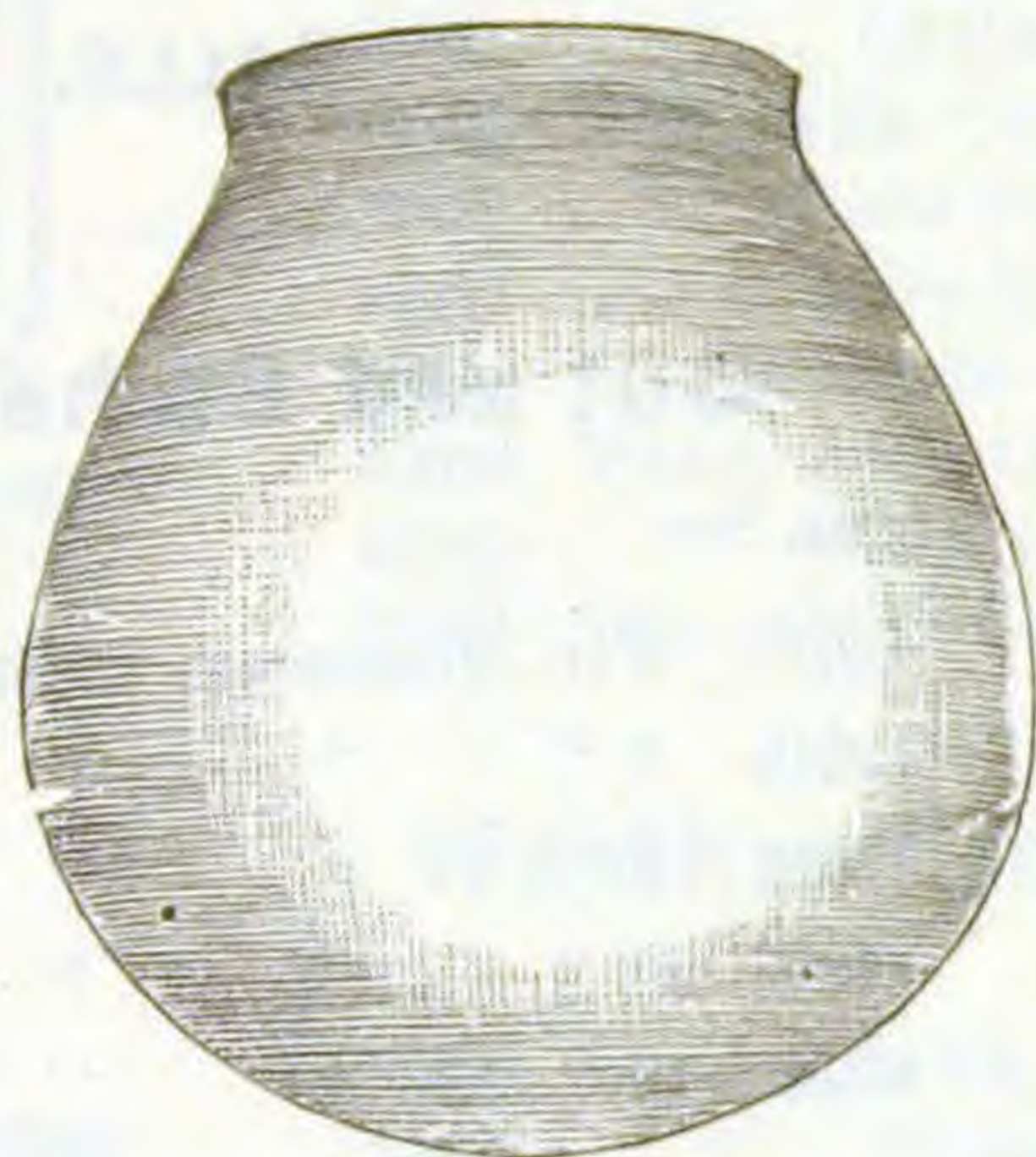
### Twist Stalactite.

4¾ in. diameter, 8¾ in. long. For 3¼ in. holder.

12010	Crystal, per doz.....	8.00
12011	Opalescent, per doz.....	9.00



## STALACTITE GLOBES.



Cat. No. 12012.

## Opal Snowball.

5 inches diameter, 6 inches long.

For  $3\frac{1}{4}$  inch holder.

Cat. No.	Price.
12012 Per dozen, .....	\$4.00



Cat. No. 12013.

## Twist Ribbed Ball.

Cat. No.		Per doz.	
		Crystal.	Opal- escent
12013	6 inches.....	\$8.00	\$9.00
12014	7 " .....	9.50	10.50
12015	8 " .....	12.00	13.50
12016	9 " .....	14.00	15.00





Cat. No. 12017.

### RICH CUT AND ETCHED GLASS<sup>TM</sup> BALLS.

#### Cut and Etched Ball.

Cat. No.	Price.
12017 6 in. diameter, each.....	\$6.75
12018 7 " " " " .....	7.50
12019 8 " " " " .....	8.50
12020 10 " " " " .....	13.00
12021 12 " " " " .....	20.00



Cat. No. 12022.

#### Rich Cut Glass Bulb.

4 in. diameter, 5½ in. long.

¾ in. Holder.

12022 Rich Cut Bulb, per dozen....\$87.50



**WEATHER-PROOF GLOBES.****Weather-Proof, for 16 Candle-Power Lamp.**

Cat. No. 12023.

Cat. No.	Price.
12023 Crystal, with Cap, each .....	\$1.00
12024 " Globe only, each.....	.50
12025 Blue, with Cap, each.....	1.25
12026 " Globe only, each.....	.75
12027 Green, with Cap, each .....	1.25
12028 " Globe only, each.....	.75
12029 Ruby, with Cap, each.....	1.88
12030 " Globe only, each .....	1.88
12031 Cap only for above, each.....	.50

**Weather-Proof, for 32 Candle-Power Lamp.**

Same Pattern as No. 12023.



Cat. No. 12041.

12032 Crystal, with Cap, each .....	1.88
12033 " Globe only, each .....	.88
12034 Blue, with Cap, each.....	2.50
12035 " Globe only, each .....	1.50
12036 Green, with Cap, each .....	2.50
12037 " Globe only, each .....	1.50
12038 Ruby, with Cap, each .....	3.13
12039 " Globe only, each.....	2.13
12040 Cap only for above, each.....	1.00

**Weather-Proof, for 16 Candle-Power Lamp.**

12041 Crystal, with Cap, each .....	1.00
12042 " Globe only, each .....	.50
12043 Blue, with Cap, each.....	1.25
12044 " Globe only, each.....	.75
12045 Green, with Cap, each.....	1.25
12046 " Globe only, each.....	.75
12047 Ruby, with Cap, each.....	1.88
12048 " Globe only, each.....	1.38
12049 Cap only for above, each.....	.50

**Vapor-Proof, for 16 Candle-Power Lamp.**

Cat. No. 12050.

12050 Crystal, with Cap, each .....	1.88
12051 " Globe only, each .....	.88
12052 Blue, with Cap, each.....	2.88
12053 " Globe only, each .....	1.88
12054 Green, with Cap, each .....	2.88
12055 " Globe only, each.....	1.88
12056 Ruby, with Cap, each.....	3.50
12057 " Globe only, each.....	2.50
12058 Cap only for above, each.....	1.00



## Arc Lamp Globes.

Our Arc Globes are of the best quality of glass and uniform in appearance. They are carefully packed, but shipped only at owner's risk. Two dozen globes are packed in regular size cask, for which we charge \$1.50 extra, net.

### CLEAR.

Cat. No.	Diameter, Inches.	Height, Inches.	Top Opening Inches.	Bottom Opening, Outside Diam. Inches.	Price per doz.
12059	12	12	6	2½	\$15.00
12060	12	12	8	3¼	15.00
12061	12	12	8	5	15.00
12062	12	12	7½	3¾	15.00
12063	12	10	8	4	15.00
12064	12	12	8	5	15.00
12065	12	12	8	2½	15.00
12066	12	11	9	4¼	15.00
12067	11	12	8	4½	15.00
12068	11	12	8	4¾	15.00



### OPAL.

12069	12	12	6	2½	16.00
12070	12	12	8	3¼	16.00
12071	12	12	8	5	16.00
12072	12	12	7½	3¾	16.00
12073	12	10	8	4	16.00
12074	12	12	8	5	16.00
12075	12	12	8	2½	16.00
12076	12	11	9	4¼	16.00
12077	11	12	8	4½	16.00
12078	11	12	8	4¾	16.00

### GROUND.

12079	12	12	6	2½	18.00
12080	12	12	8	3¼	18.00
12081	12	12	8	5	18.00
12082	12	12	7½	3¾	18.00
12083	12	10	8	4	18.00
12084	12	12	8	5	18.00
12085	12	12	8	2½	18.00
12086	12	11	9	4¼	18.00
12087	11	12	8	4½	18.00
12088	11	12	8	4¾	18.00



## SERIES LAMPS.

Particular attention is called to the following general remarks on series lamps.

**If these remarks are carefully read** before ordering or using any of these series lamps, purchasers will save themselves and us considerable trouble and delay.

### Points as to all Series Lamps.

The most important point in burning lamps in series is that the amperes of each of the lamps in any one series should be the same within three one-hundredths of an ampere.

The voltage of the lamps may vary, but the sum of the voltages in any series must equal the voltage of the circuit within three volts.

In selecting lamps for any one series, use only lamps of approximately the same amperes, and see that the sum of their voltages equals the voltage of the circuit.

In replacing a lamp which has burned out in any series, use only a lamp of the same voltage and amperes as the one broken.

In ordering series lamps to replace those burned out, give both voltage and amperes of those in use ; also, voltage of circuit.

### Candelabra Lamps.

These lamps are made in three different styles, A, B and C, and are furnished, when specified, to be burned—either two, three or four in series—on electric lighting circuits of 100 to 120 volts ; and two in series, or in multiple, on circuits of from 50 to 60 volts.

Style A is always a ten candle-power lamp.

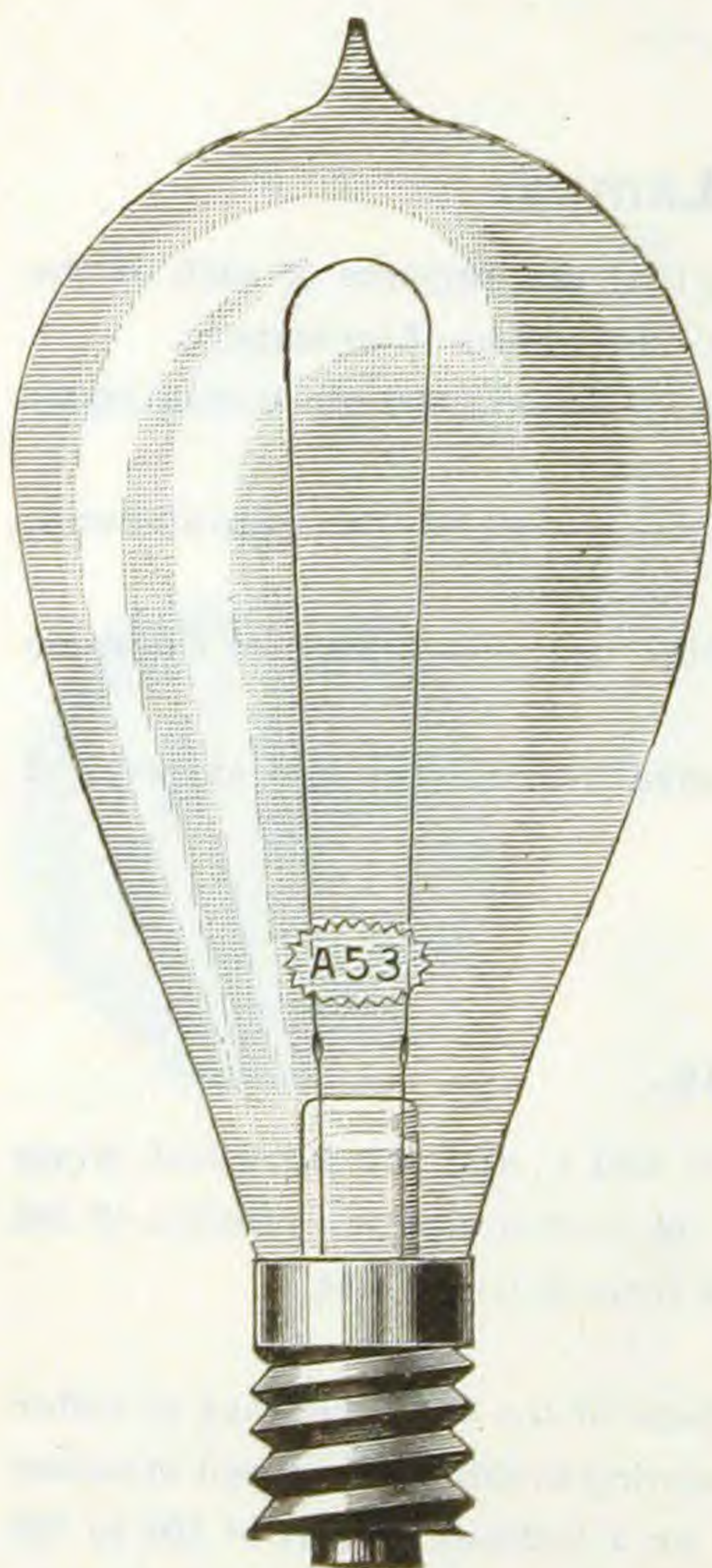
Styles B, C and D differ from each other only in the shape of the bulb, but they all differ from style A in that the candle-power of the lamp varies according to the number used in series ; that is, if the lamps are intended to be used two in series on a lighting circuit of 100 to 120 volts, the lamps will be made to give eight candle-power each ; if intended to be used three in series, the candle-power of each of the lamps will be made about five ; and, if intended to be used four in series, the candle-power of each lamp will be made about four.

### Special Series Lamps.

The lamps are called "Special Series" lamps to distinguish them from Candelabra and Battery lamps. We furnish these in four different candle-powers for burning on electric lighting circuits of 100 to 120 volts, or on circuits of 50 to 60 volts.



Actual Size.



8 C. P.

2 in Series on 100-120 Volts.  
In M'pl. on 50-60 "

Current required for each Series will  
average about .50 Ampere.

## Special Series Lamps.

This Lamp will fit Candelabra Receptacles.

This Lamp is used for decorative purposes where large units of light, but few in number, are desired. In illuminations covering a large area, this lamp can be used advantageously.

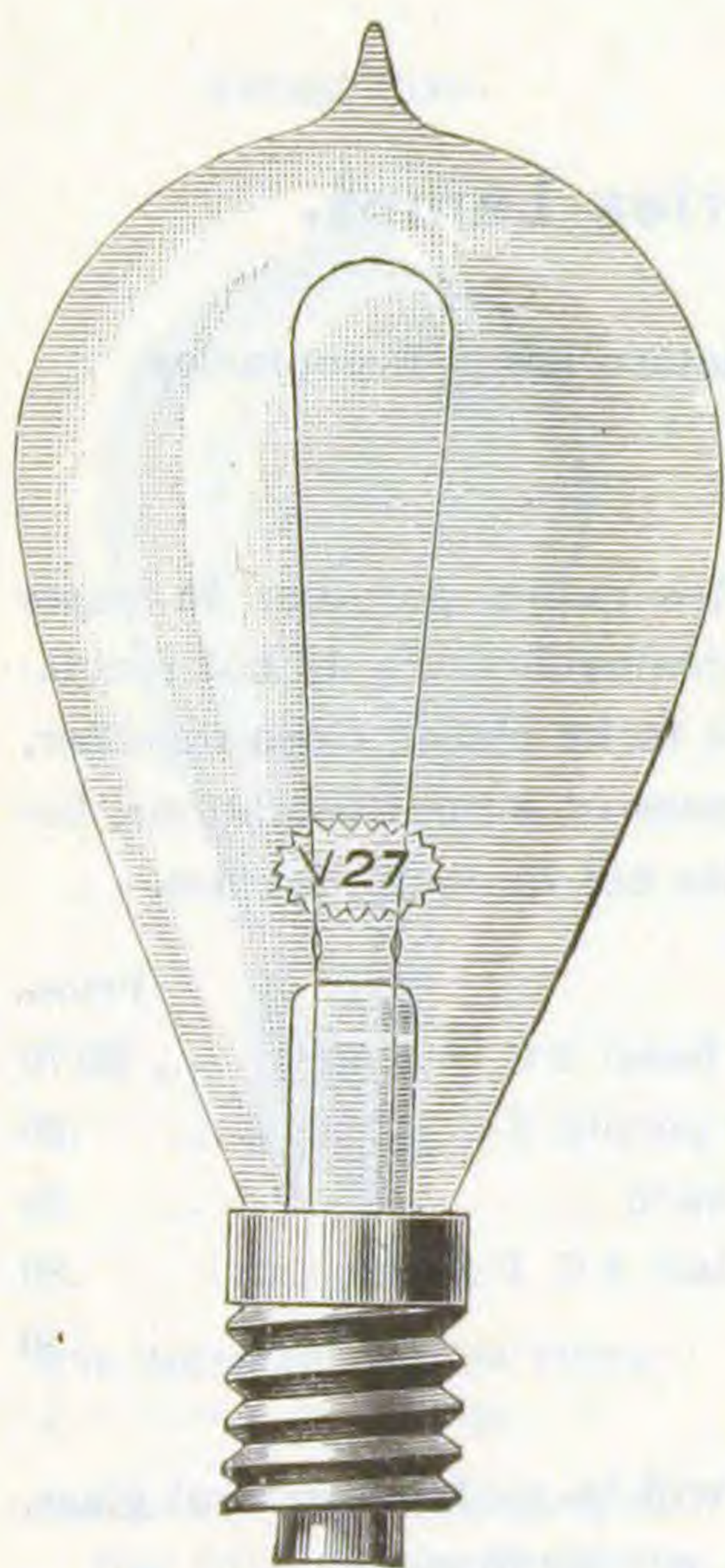
Before ordering, the remarks as to Series Lamps should be read.

Cat. No.	Price.
12089 Plain (including screw base), 8 C. P., each .....	\$0.90
12090 Colored, green, blue or purple, 8 C. P., each.....	1.00
12091 Colored, ruby, 8 C. P., each.....	1.75
12092 Colored, amber (artificial), 8 C. P., each..	1.00
12093 Frosted, 8 C. P., each.....	1.00

All colored Series Lamps will be made of natural glass, except amber-colored, which will be dipped.



Actual Size.



5 C. P.

4 in Series on 100-120 Volts.

2 " " " 50-60 "

Current required for each Series  
will average about .55 Ampere.

### Special Series Lamps.

This Lamp will fit Candelabra Receptacles.

This lamp is used for decorative purposes where large units of light, but few in number, are desired. In illuminations covering a large area this lamp can be used advantageously.

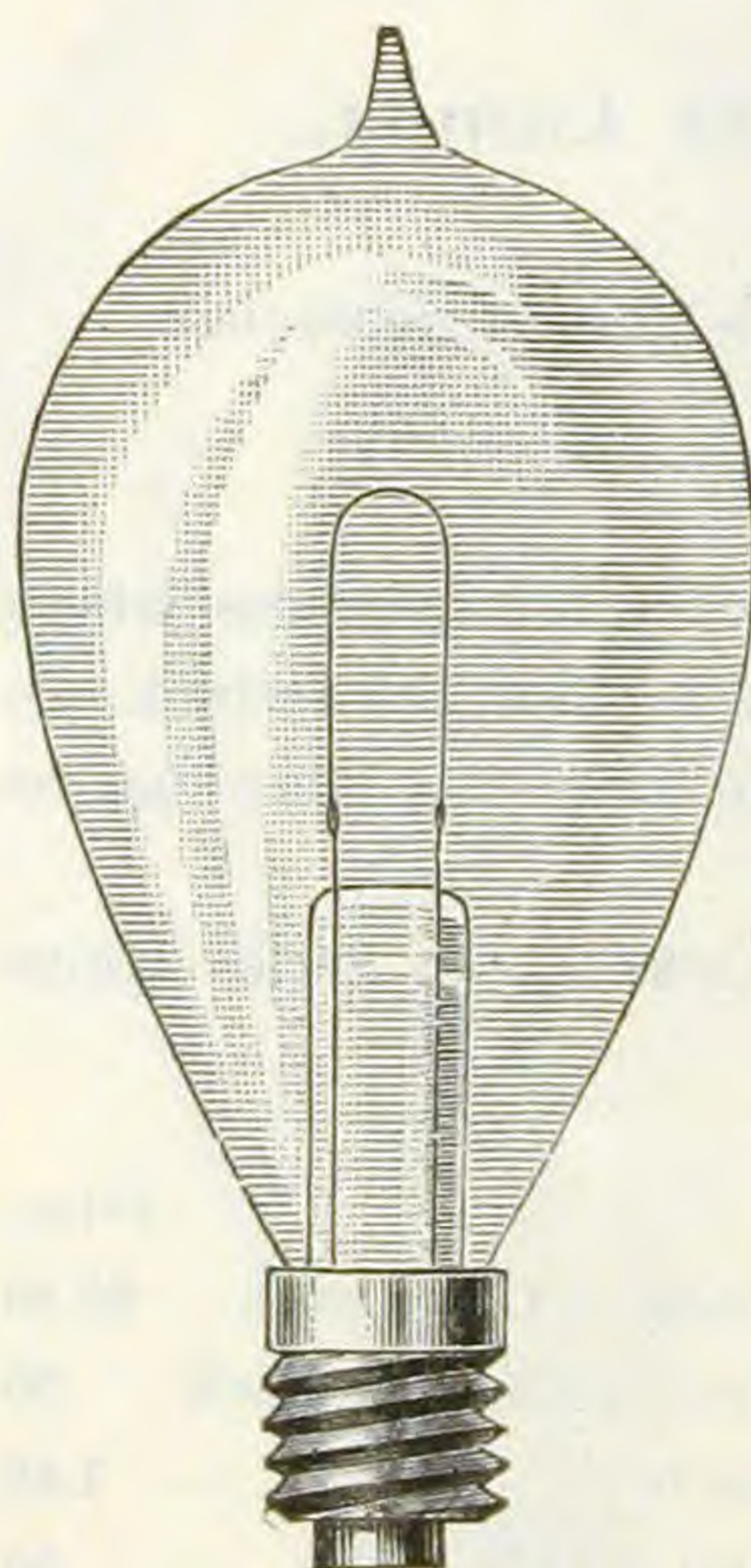
Before ordering, the remarks as to Series lamps should be read.

Cat. No.	Price.
12094 Plain (including screw base), 5 C. P., each...	\$0.80
12095 Colored, green, blue or purple, 5 C. P., each.	.90
12096 Colored, ruby, 5 C. P., each ...	1.30
12097 Colored, amber (artificial), 5 C. P., each.....	.90
12098 Frosted, 5 C. P., each.....	.90

All colored Series Lamps will be made of natural glass, except amber-colored, which will be dipped.



Actual Size.



3 C. P.

8 in Series on 100-120 Volts.

4 " " " 50-60 "

Current required for each Series will average about  
1 Ampere.

## Special Series Lamps.

This Lamp will fit Miniature Lamp Receptacles.

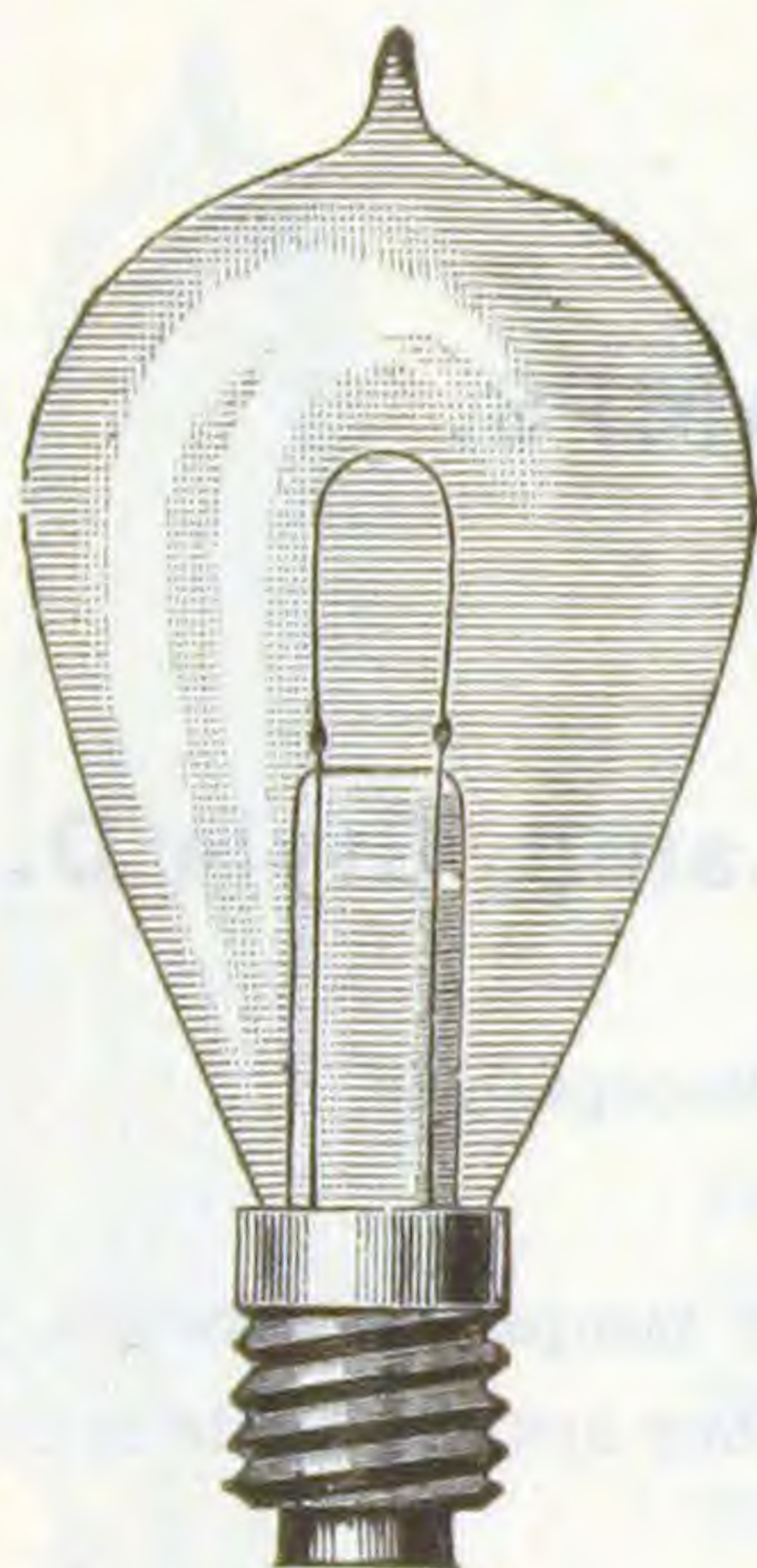
This lamp is used for decorative purposes in cases where plenty of current is obtainable. We do not recommend its use where lamps are to be placed close together, as in sign work and many cases of floral decorations, because this lamp becomes quite hot in continued use.

Cat. No.	Price.
12099 Plain (including screw base), 3 C. P., each.....	\$0.70
12100 Colored, green, blue or purple, 3 C. P., each.....	.80
12101 Colored, ruby, 3 C. P., each.....	.95
12102 Colored, amber (artificial), 3 C. P., each.....	.80
12103 Frosted, 3 C. P., each. ....	.80

All colored Series Lamps will be made of natural glass, except amber-colored, which will be dipped.



Actual Size.



1 C. P.

8 in Series on 100-120 Volts.

4 " " " 50- 60 "

Current required for each Series will average about  
.33 Ampere.

### Special Series Lamps.

This Lamp will fit Miniature Lamp Receptacles.

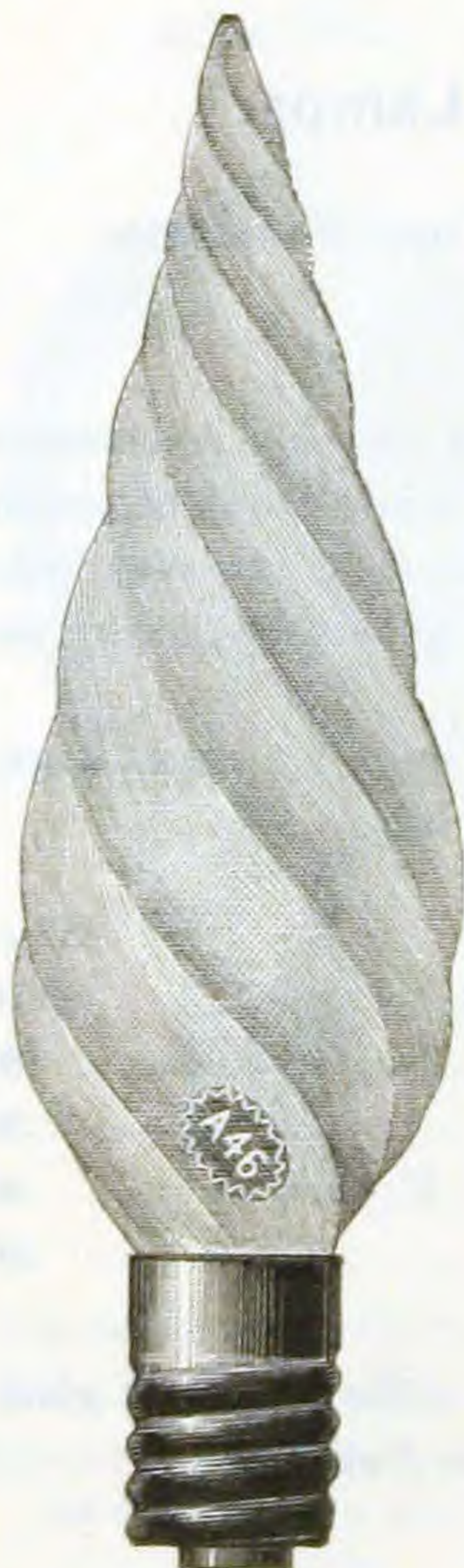
This is the lamp which we most strongly recommend for sign and decorative work where lamps are to be placed close together. It gives a good light, generates very little heat, and each series requires only about one-third of an ampere of current.

It is, therefore, the best small lamp for series work, whether for signs, among flowers, or otherwise.

Cat. No.	Price.
12101 Plain (including screw base), 1 C. P., each.....	\$0.70
12105 Colored, green, blue or purple, 1 C. P., each.....	.80
12106 Colored, ruby, 1 C. P., each.....	.95
12107 Colored, amber (artificial), 1 C. P., each.....	.80
12108 Frosted, 1 C. P., each.....	.80

All colored Series Lamps will be made of natural glass, except amber-colored, which will be dipped.





Actual Size.

**SERIES LAMPS.****Candelabra Flame Lamp, Style D.**

Will fit Candelabra Receptacles.

Unless otherwise ordered, these lamps are frosted, as a better effect is thereby obtained. They are not made in colors.

Cat. No.	Price.
12109 Frosted, each.....	\$0.90
12110 Plain, each.....	.80





Actual Size.

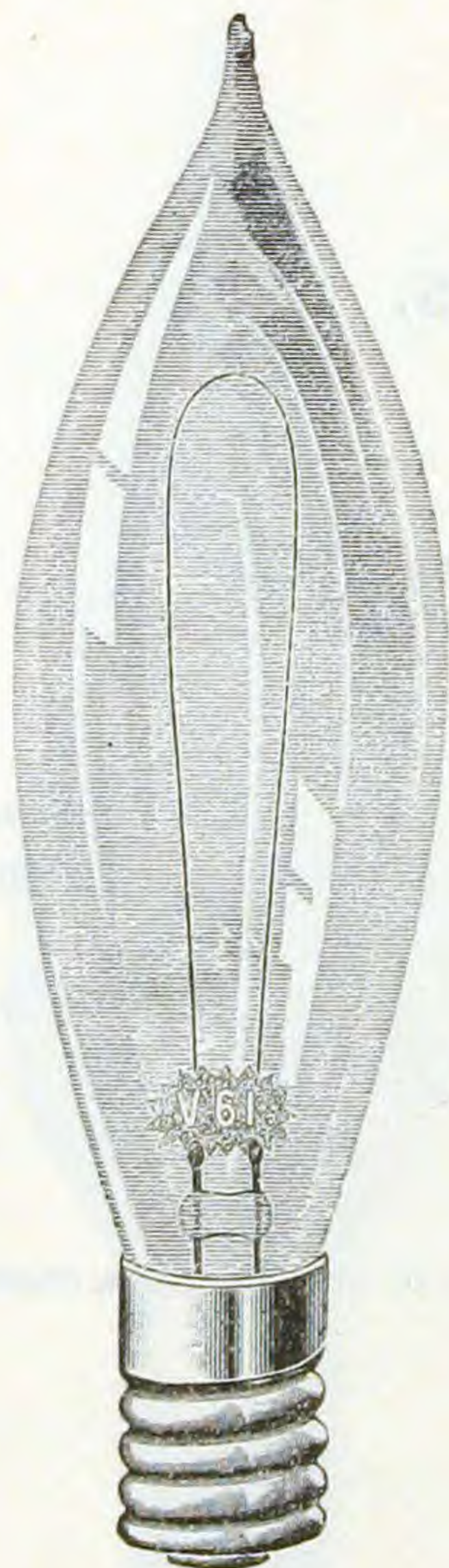
**SERIES LAMPS.****Candelabra Lamp, Style C.**

Will fit Candelabra Receptacles.

Cat. No.	Prices.
12111 Price, plain, each.....	\$0.80
12112 Colored, green, blue or purple, each.....	.90
12113 Colored, ruby, each .....	1.20
12114 Colored, amber (artificial), each.....	.90
12115 Frosted, each .....	.90

All colored Candelabra Lamps will be made of natural glass, except amber-colored, which will be dipped.





Actual Size.

## SERIES LAMPS.

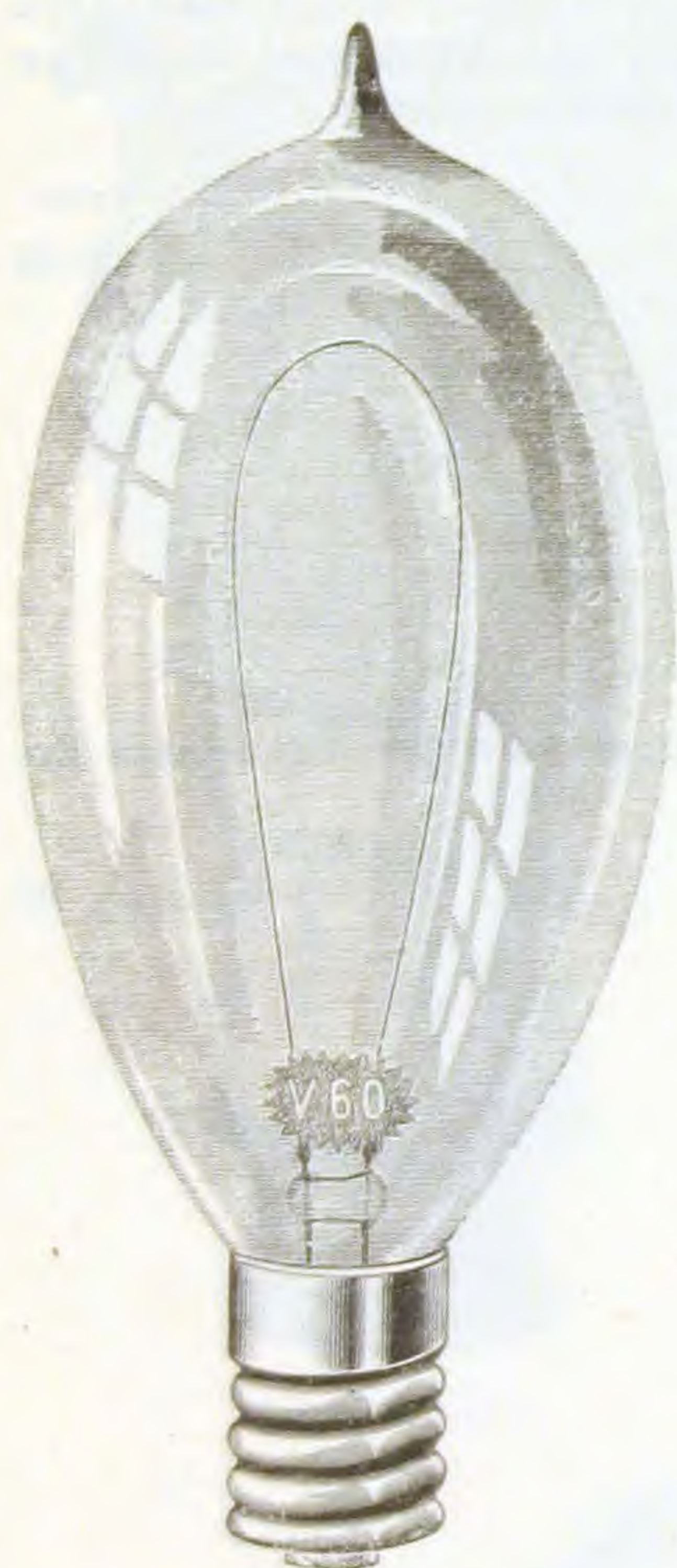
### Candelabra Lamp, Style B.

Will fit Candelabra Receptacles.

Cat. No.	Price.
12116 Price, plain, each .....	\$0.80
12117 Colored, green, blue or purple, each.....	.90
12118 Colored, ruby, each ..	1.20
12119 Colored, amber (artificial), each.....	.90
12120 Frosted, each.....	.90

All colored Candelabra Lamps will be made of natural glass, except amber-colored, which will be dipped.





Actual Size.

**SERIES LAMPS.****Candelabra Lamp, Style A.**

Will fit Candelabra Receptacles.

Cat. No.	Price.
12121 Plain, each.....	\$0.80
12122 Colored, green, blue or purple, each.....	1.00
12123 Colored, ruby.....	1.50
12124 Colored, amber (artificial), each.....	1.00
12125 Frosted, each.....	.90

All colored Candelabra Lamps will be made of natural glass, except amber-colored, which will be dipped.





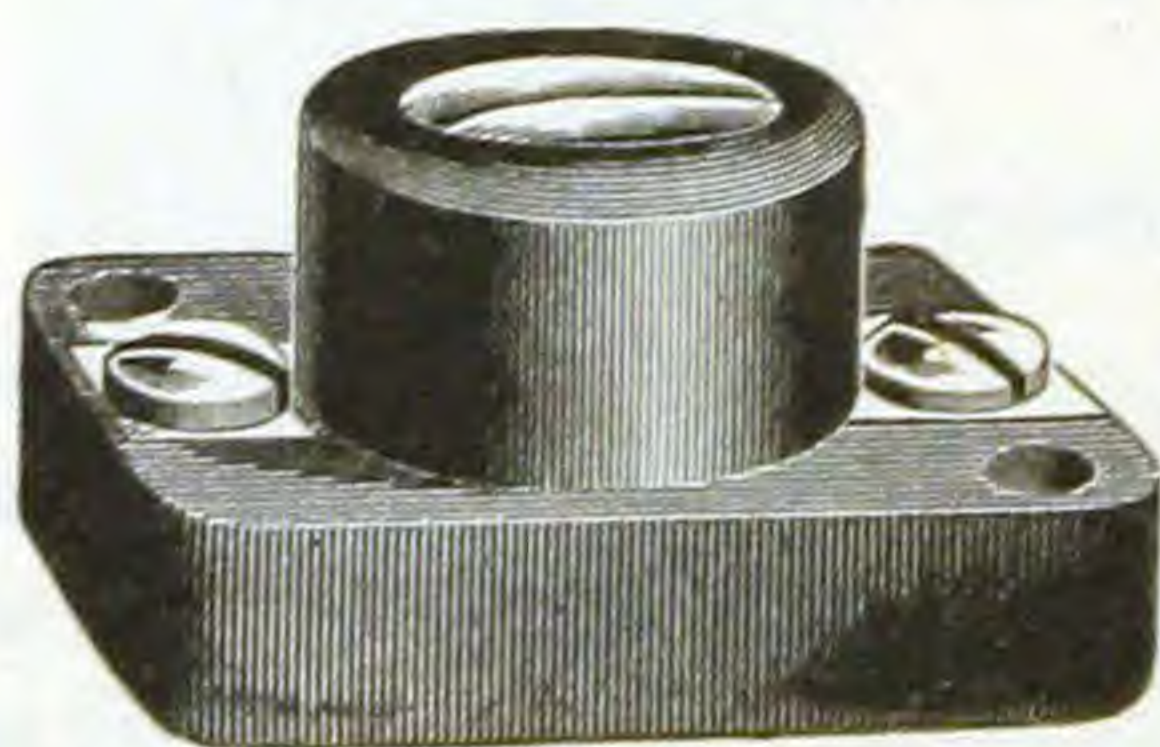
Cat. No. 12126.

## Receptacles for Candelabra Lamps.

These receptacles are made of a non-combustible, insulating material, and special care is exercised in their construction and manufacture.

No. 12126 is known as the Standard Round Candelabra Receptacle. It is screwed into the central supporting tube, and the candle covers it completely.

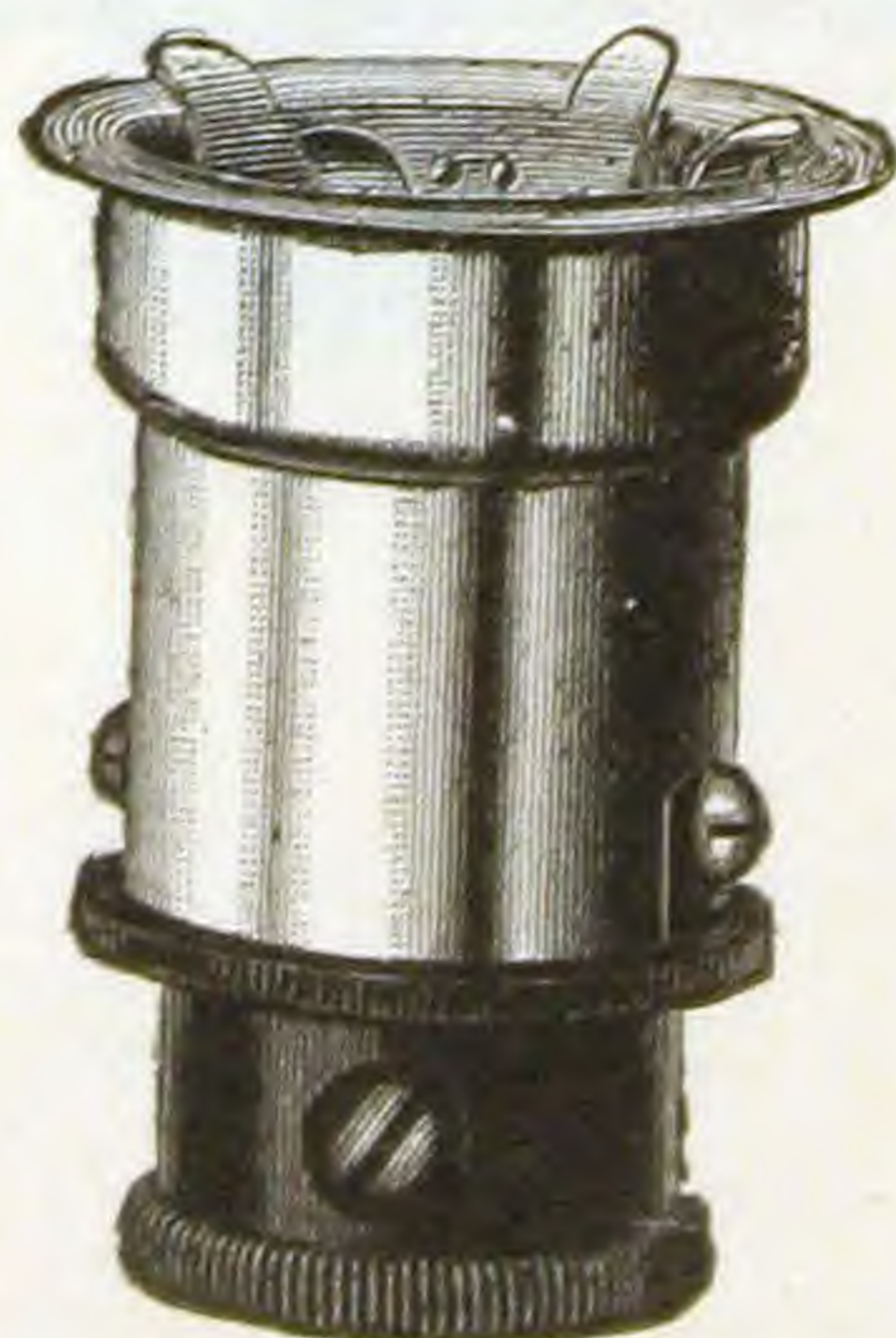
Cat. No.	Price.
12126 Each .....	\$0.30



Cat. No. 12127.

No. 12127 is the Standard Flat-Base Candelabra Receptacle.

12127 Each. ....	.30
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Cat. No. 12128.

No. 12128 is the Candelabra Receptacle used when shades are employed. It is known as the Shade-Holder Receptacle.

12128 Each.....	.75
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Cat. No. 12129.

## Receptacles for Miniature Lamps.

No. 12129 is the Standard Round Miniature Lamp Receptacle. Mounted on porcelain.

Cat. No.	Price.
12129 Each .....	\$0.30



Cat. No. 12130.

No. 12130 is the Standard Receptacle for use where shades are employed with miniature lamps. It is known as the Miniature Shade-Holder Receptacle.

Cat. No.	Price.
12130 Each .....	\$0.75



Cat. No. 12131.

## Star Shades with Colored Edging.

These shades are made especially for certain classes of decorative work, and present a very handsome and striking effect when the lamps are lighted.

Cat. No.	Price.
12131 Each .....	\$1.00





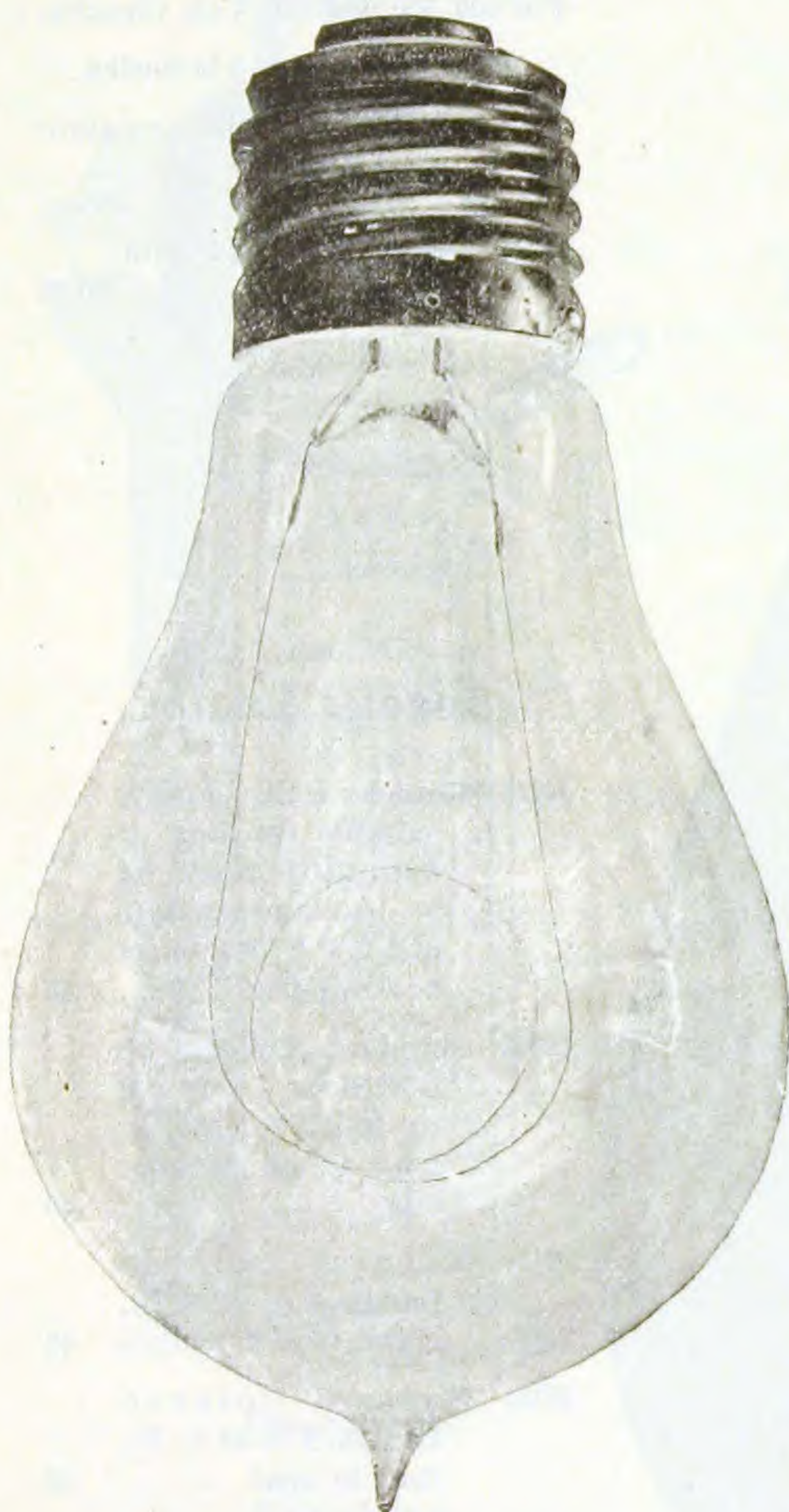
Cat. No. 12132.

### Candle Lamp.

Candle Lamp for Chandeliers. Frosted, having filament anchored. This lamp will be furnished plain if desired, for use as a bunghole lamp. Any voltage from 45 to 125 volts, and with any standard base.

Cat. No.	Price.
12132 Each .....	..\$0.45





$\frac{3}{8}$  Size.

Cat. No. 12133 $\frac{1}{2}$ .

## The Teutonic Lamp.

A High Grade Lamp.

Honest Candle-Power.

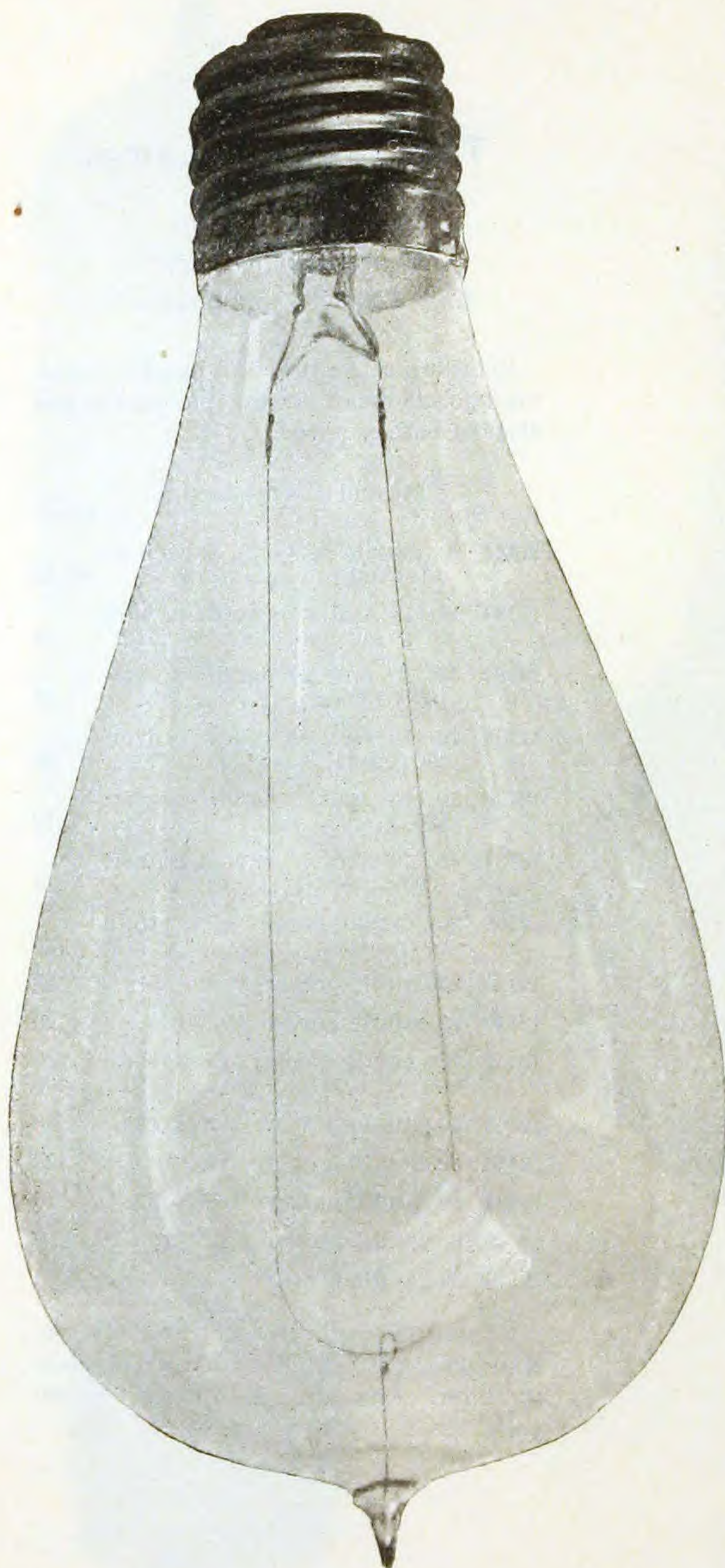
High Efficiency and Long Life.

In ordering Lamps, state candle-power, voltage, efficiency in watts per candle, and style of base required.

Cat. No.	$3\frac{1}{2}$ and 4 Watt Lamps.	Price.
12133	8 candle-power, especially adapted for sign work.....	\$0.28
12133 $\frac{1}{2}$	10, 16 and 20 candle-power, less than 100.....	.22
12134	10, 16 and 20 candle-power, 100 to 250.....	.21
12135	10, 16 and 20 candle-power, 250 (barrel lots) .....	.20
12136	10, 16 and 20 candle-power, 500 .....	.19
12137	10, 16 and 20 candle-power, 1000.....	.18
12138	25 candle-power, less than barrel lots.....	.25
12139	25 candle-power, barrel lots..	.22
12140	25 candle-power, 1000 lots ...	.20
12141	32 candle-power, less than barrel lots.....	.35
12142	32 candle-power, barrel lots..	.30
12143	32 candle-power, 1000 lots....	.28
12144	50 candle-power.....	.75
12145	100 candle-power.....	2.00
12146	200 candle-power.....	4.00

Edison, Thomson-Houston and Sawyer-Man base in stock. All other style bases to order. Any voltage from 45 to 240 volts.





Cat. No. 12147.

### Railway Lamps.

For 500, 550 and 600 Volt Circuits.

16 Candle-Power, 5 in Series.

New Type Lamps, with any style  
Base.

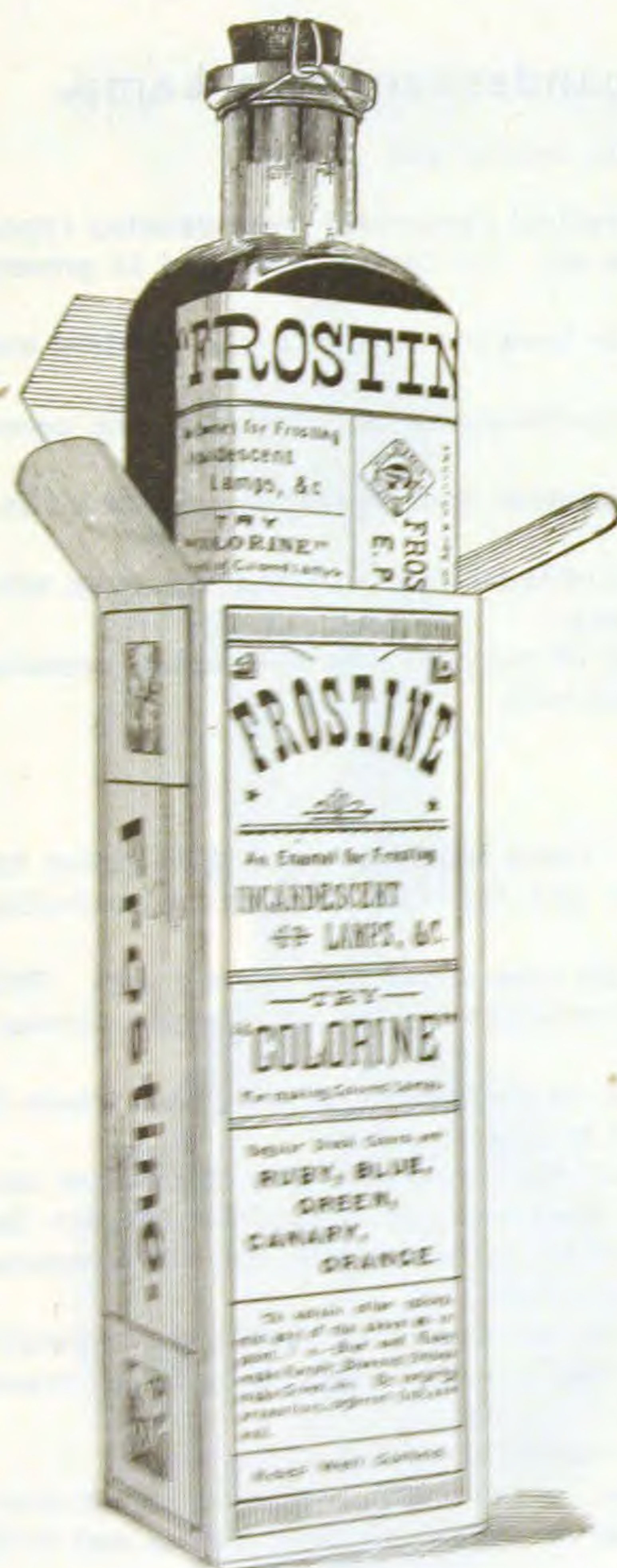
Cat. No.	Price.
12147 Spiral Anchored Filament.....	\$0 28

### Special Lamps.

12148 Round Bulb Lamp, suitable for sign or decorative work, $2\frac{1}{8}$ in. in diameter, 8, 10 and 16 C.P., 3.1 Watts or 3.6 Watts. ....	.35
12149 Standard Tubular or Bunghole Lamps, 8 to 16 C. P., $5\frac{7}{8}$ in. long, $1\frac{1}{4}$ in. in diameter .....	.40
12150 Natural Colored Lamps, 8 to 24 C. P., green, blue or purple	.40
12151 Natural Colored Lamps, 8 to 24 C. P., ruby or opal.....	.53
12152 High Volt (200 to 250) Lamps, 16 C. P.....	.35
12153 High Volt (200 to 250) Lamps, 32 C. P.....	.56

Frosted and Superficially Colored Lamps, all candle powers, 20 per cent. additional to price of plain lamps.





Cat. No. 12154.

### Frostine,

For Coating Incandescent Lamps with an Enamel Resembling Ground Glass.

Cat. No.	Price.
12154 Per 4 oz. bottle.....	\$1.00
12155 Per quart can.....	25
12156 Per gallon can.....	25.00



Cat. No. 12157.

### Colorine,

For Coloring Incandescent Lamps with an Enamel of any of these colors: Ruby, Blue, Green, Orange, Canary.

Cat. No.	Price.
12157 Per 4 oz. bottle.....	\$1.00
12158 Per quart can.....	25
12159 Per gallon can.....	25.00

Intermediate shades can be obtained by bleeding the proper colors.



## The "Manhattan" Standard Incandescent Arc Lamp.

Manufactured under patents of Wm. Jandus and others.

This lamp has so many new features that are radical departures from existing types, that it is difficult to give sufficient prominence to them all. The lamp is designed to present the following advantages:

One pair of half-inch carbons are guaranteed to burn not less than one hundred and fifty hours.

The lamp will burn singly, with economy, on incandescent circuits, avoiding the necessity of placing two lamps in series.

The double closed globes act as a perfect spark arrester, making the lamp fire-proof and absolutely noiseless in burning.

A perfect diffusion of light is obtained by the use of the double globes, doing away, with all shadow on the globe and above and beneath the lamp.

Fewness of working parts and decrease in cost of repairs. The mechanism contains neither clock work, levers, dash-pots, racks, nor carbon rods.

Susceptibility to artistic design.

Entire mechanism concentric to central stem.

Length, 37 inches.

The most important feature of the "Manhattan" Lamp is the use of double globes enclosing the arc, which system is covered by broad and fundamental patents controlled absolutely by this Company.

Figure 12160 shows the standard outside lamp with clear outer and inner globes. This lamp is provided with a water-proof brass shell. The terminals are led into the cap through inclined insulated openings.

The rheostat is placed on the lower carbon holder, in the bottom of the globe, where it is thoroughly protected, does not cast any shadow and is easy of access.

A special feature of the "Manhattan" Lamp is the effect produced by a clear outer and alabaster inner globe, which, while diffusing the light, does away with shadows beneath the lamp, and while relieving the strain on the eyes, caused by the naked arc, cuts off comparatively little light, and the effect is a ball of uniform white light.

Figure 12161 shows the standard lamp for inside service; these lamps are generally provided with opalescent outer and inner globes. The standard shell is polished brass, although all styles of finish on brass will be furnished.

The rheostat for the inside lamp is placed in the canopy at the top of the lamp.

Lamps will be furnished with clear, horizontal or vertical half-ground, full-ground, opalescent, or heavy opal outside globes, and with clear or opalescent inner globes, and with or without individual switches.

Our standard incandescent arc lamps will be furnished to be burned singly on circuits of from ninety to one hundred and thirty volts.

Lamps will also be supplied to burn from two to six in series on circuits ranging from two hundred to five hundred and fifty volts.

Each lamp can be adjusted for any voltage or amperes within the above limit.

The "Manhattan" Standard lamp will be adjusted to from four to seven amperes, according to the amount of light required, but each lamp will be provided with means of adjusting within these limits if so specified. Each lamp may also be easily adjusted within the limits of voltage given.

The Standard lamp is thirty-seven inches long.

The "Manhattan Junior" lamp is twenty-four inches long, and adjusted for from two to four amperes as required.



The "Manhattan" Standard Incandescent Arc Lamp.



Cat. No. 12160.



Cat. No. 12161.

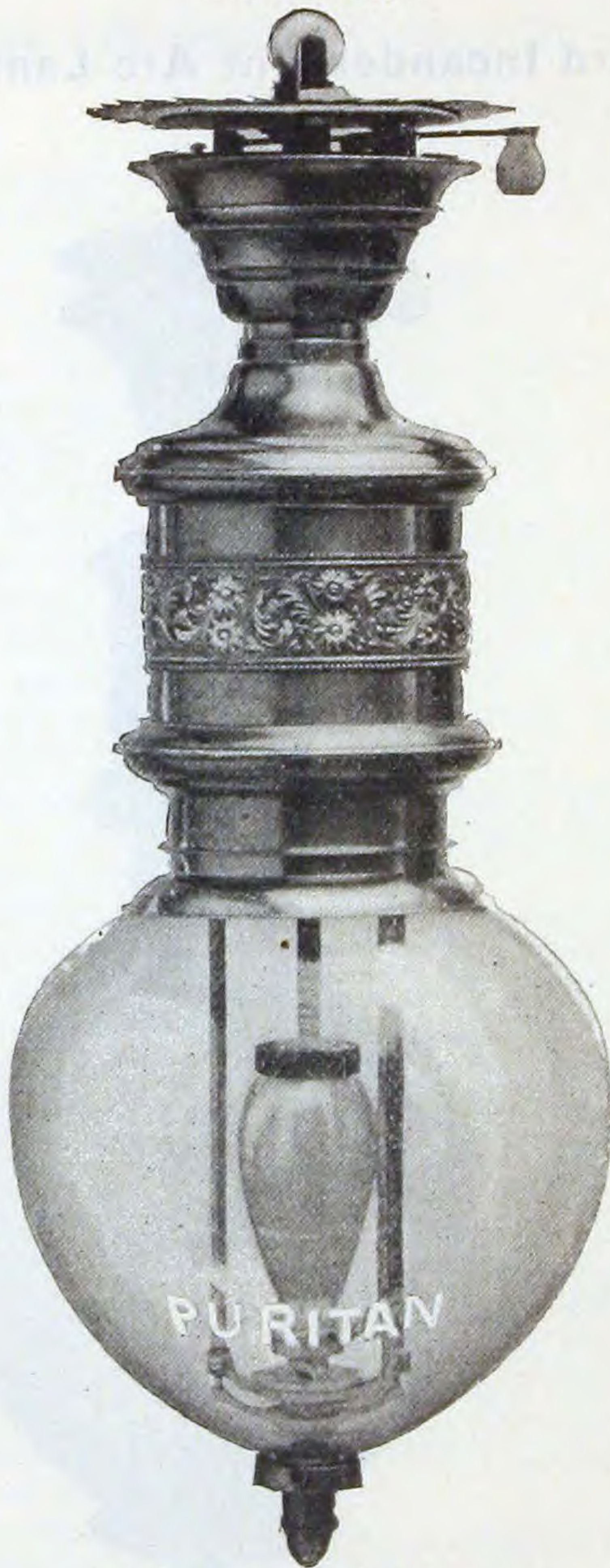
For Direct Current.

Cat. No.	Price
12160 Manhattan Arc Lamp.....	\$40.00
12161 .....	45.00



**Alternating Current Arc Lamps.**

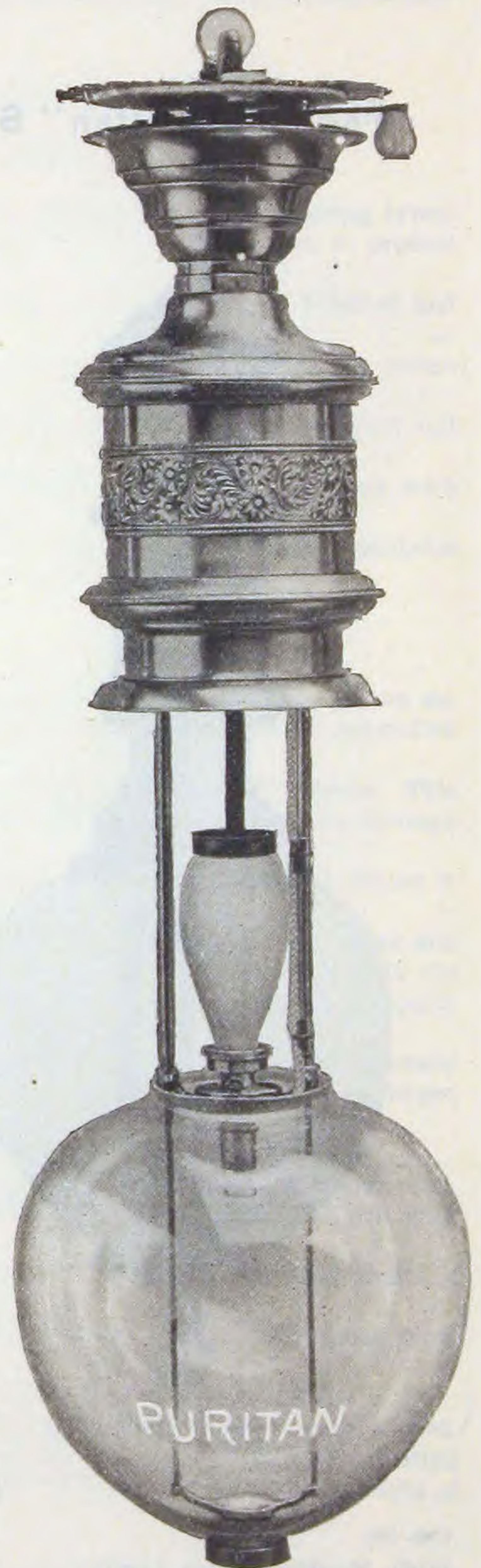
100-Hour Type.



Cat. No. 12162. Closed Lamp.

We guarantee all our lamps to fulfill the following claims, provided they are installed according to printed directions accompanying each lamp:

1st—This Alternating Arc Lamp will burn for 100 continuous hours with one trimming. 2d—No economy coil or resistance is used. 3d—Positively noiseless, **non**-humming. 4th—Burns as steady and noiseless as the Enclosed Direct Current Arc Lamp. 5th—Only 10 inches carbon consumed in 100 hours' burning. 6th—400 watts consumed per lamp to produce 2000 nominal candle-power. 7th—These lamps are placed on either 52 or 104 volt circuit independently.



Cat. No. 12162. Open.



## 100-Hour Alternating Current Arc Lamps.

With this lamp no external and wasteful resistance is needed. The feeding mechanism is positive; the parts are durable and interchangeable; the regulation is perfect and the arc remains central, as all our lamps are made focusing, *i. e.*, both carbons move and maintain the arc in the center of the globe. The lamps will start or pick-up without the chattering or jumping so common in all other lamps.

### 100-HOUR LAMPS.

#### PLAIN ALTERNATING CURRENT ARC LAMPS.

Cat. No.		No. Burning Hours.	Price.
12162	Standard, Iron Finish .....	100 .....	\$50.00
12163	"    Polished Brass .....	100 .....	55.00

#### ORNAMENTAL ALTERNATING CURRENT ARC LAMPS.

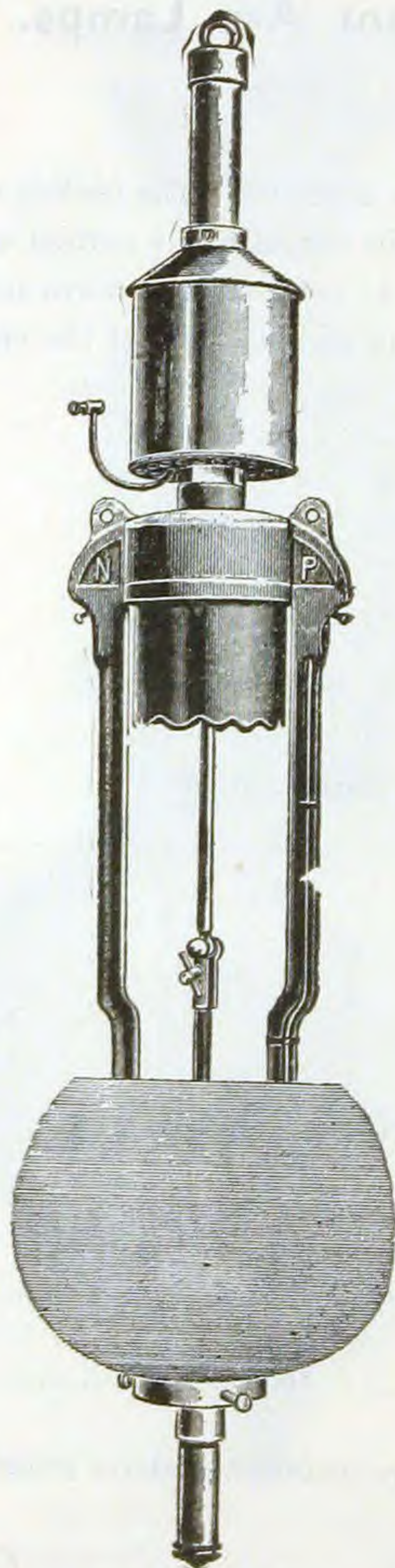
12164	Standard, Brass or Copper Bronze Finish.....	100 .....	66.00
12165	"    "    "    "    "    " .....	100 .....	85.00
12166	"    "    "    "    "    " .....	100 .....	120.70
12167	"    "    "    "    "    " .....	100 .....	127.00

Spark Arresters and Clear or Opal Globes are included in above prices.

This lamp is not affected by shipping, and requires no adjusting before installing; and, to sum up in a few words, it is the simplest and most efficient Alternating Current Arc Lamp yet offered.



## Direct Current Arc Lamps.



Cat. No. 12168.

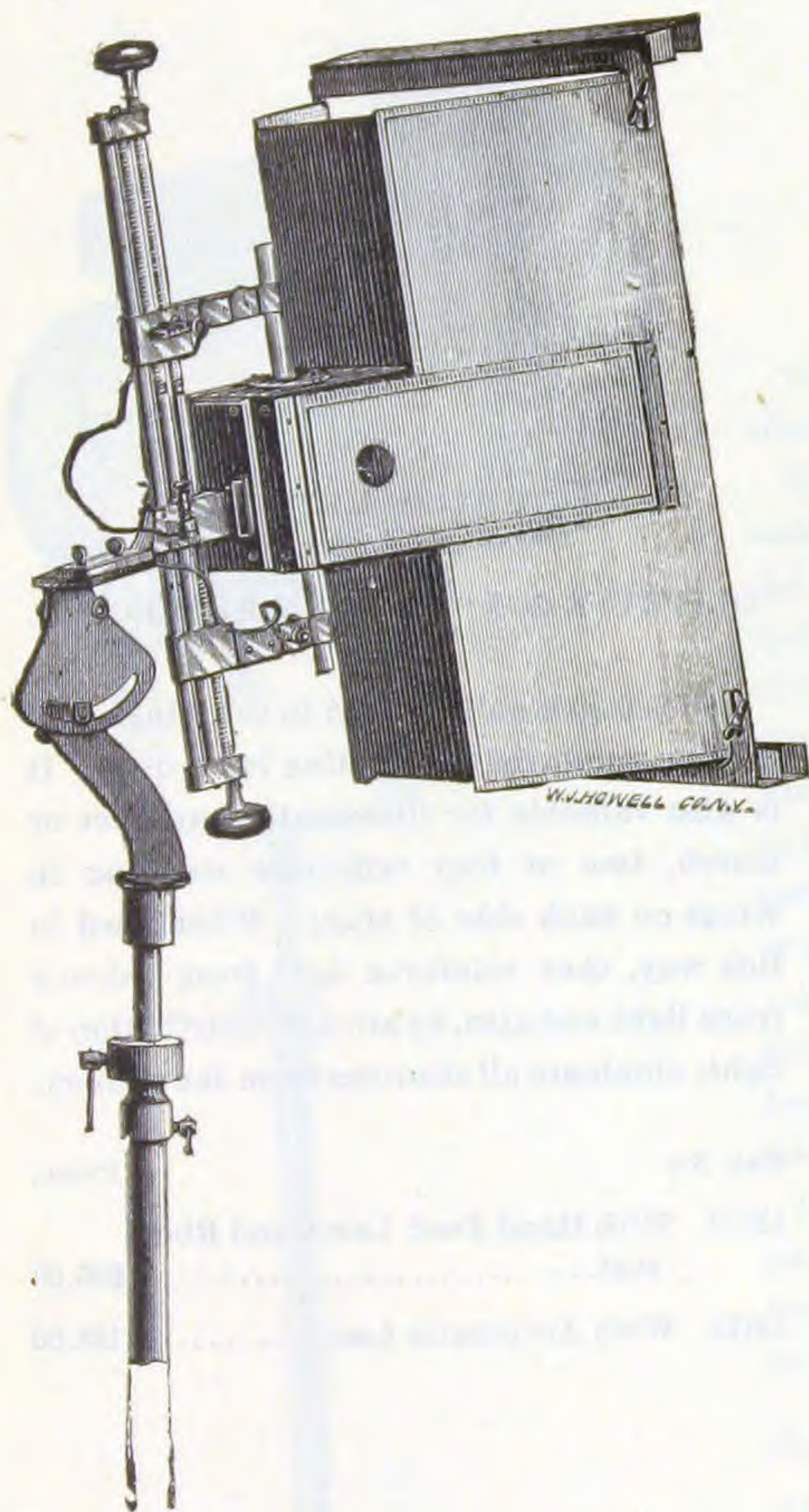


Cat. No. 12169.

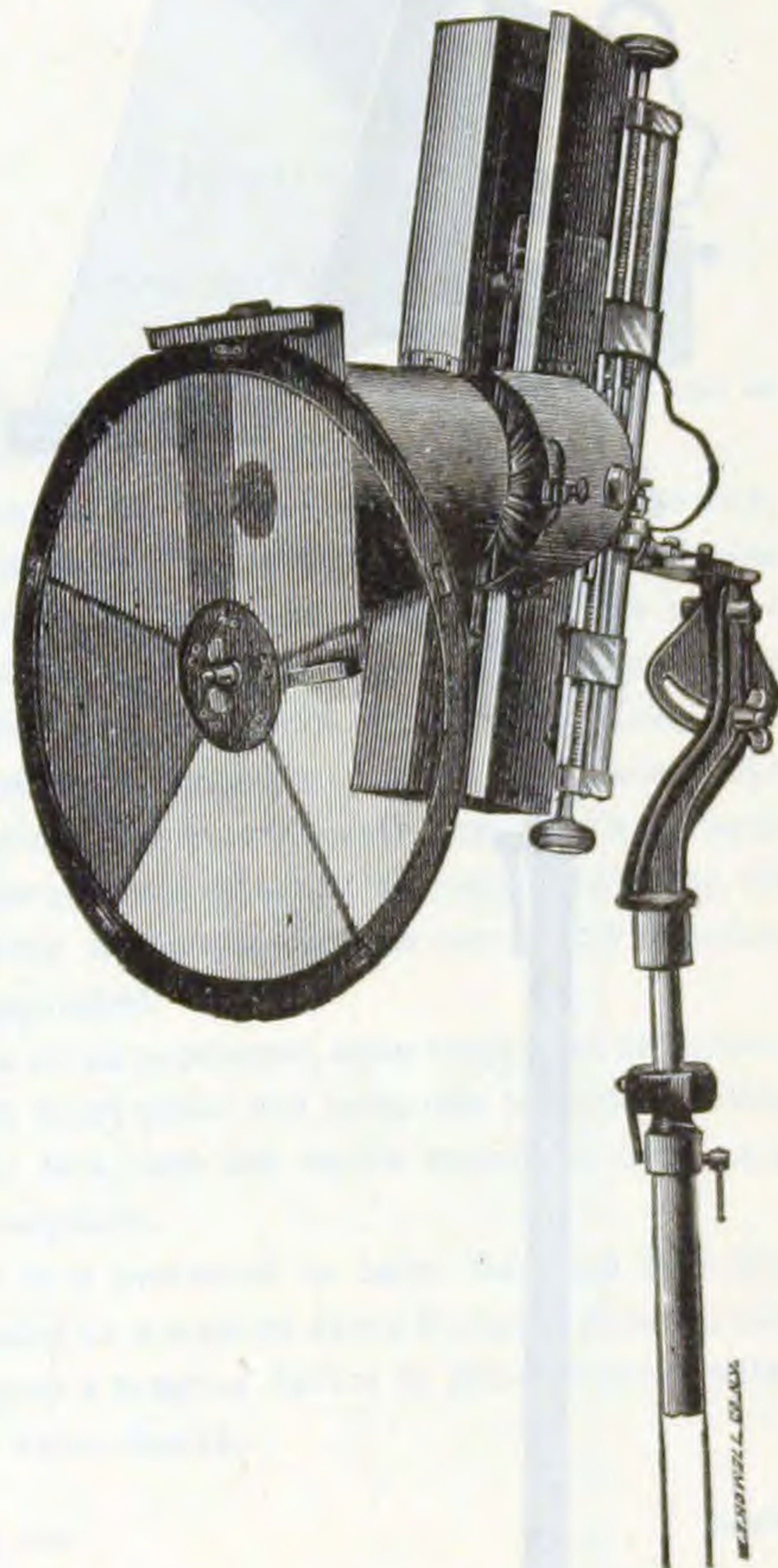
Cat. No.		Price.
12168	Plain Long Lamp.....	\$18.00
12169	Ornamental Brass Lamp.....	50.00



# Theatre Lamps.



Cat. No. 12170.



Cat. Nos.  
12172  
12173

## HAND-FEED LAMP.

## LENS BOX AND OLIVETTE BOX COMBINED.

Figure 12170 shows the Hand-Feed Lamp, with Olivette Box in place ready for use. It is provided with double grooves for mediums.

Figure 12172 and 12173 shows Lens Box and Color Wheel. The lens is adjustable, so that a beam of light of any desired size may be obtained. When the Color Wheel is not desired, framed tinters may be used in the grooves in front of lens. This apparatus is provided with universal adjustment, so that it may be used as a "chaser" with the greatest ease.

Cat. No.		Price.
12170	Lamp, Adjustable Stand and Rheostat.....	\$66.00
12171	Olivette Box or Open Reflector . . . . .	18.00
12172	Lens Box . . . . .	30.00
12173	Color Wheel....	13.00





Cat. No. 12174.

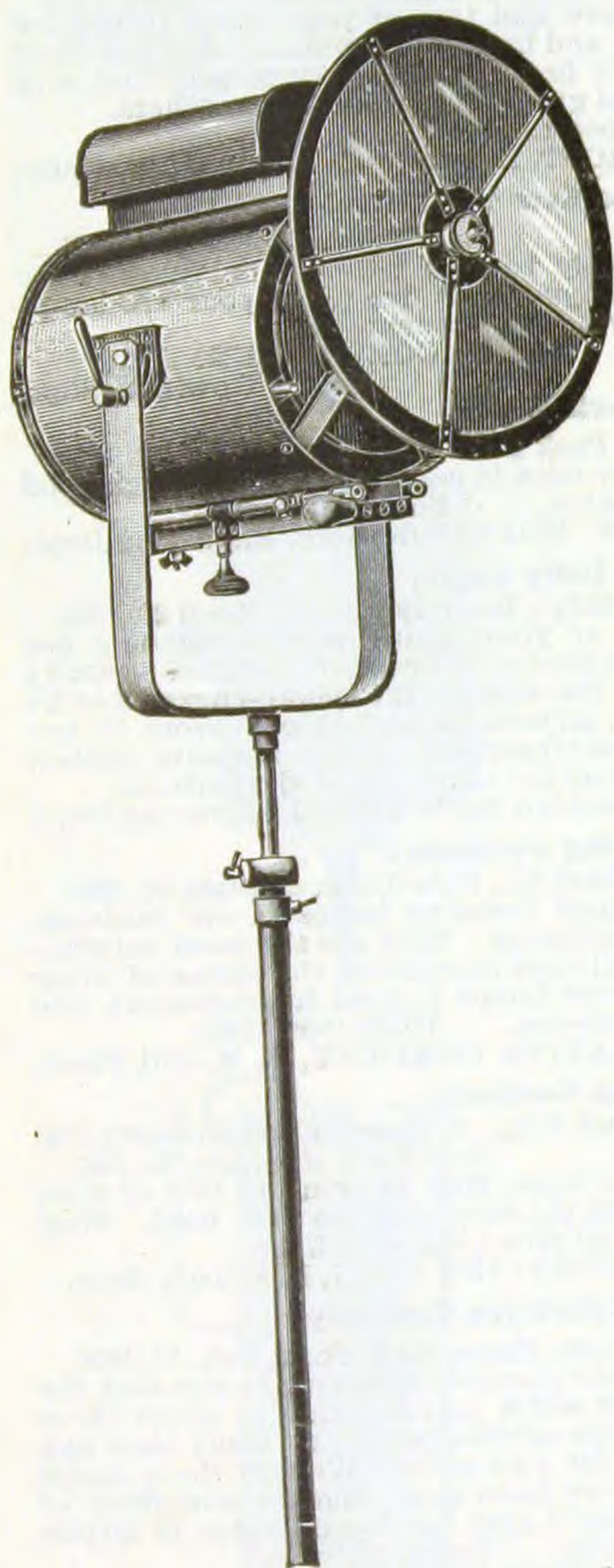
### Theatre Lamps.

#### "OLIVETTE BOX" OR OPEN REFLECTOR.

This is generally placed in the wings, and is often employed for lighting back drop. It is also valuable for illuminating a ballet or march, two or four reflectors standing in wings on each side of stage. When used in this way, they reinforce light from balcony front light and also, by an even distribution of light, eliminate all shadows from the scenery.

Cat. No.	Price.
12174 With Hand-Feed Lamp and Rheostat.....	\$95.00
12175 With Automatic Lamp.....	125.00





Cat. No. 12176.

## Theatre Lamps.

### LENS BOX OR "CHASER."

This is an ideal piece of apparatus for use in illuminating a serpentine dance.

The lamp is entirely enclosed within the box, and a perfectly dark stage can be had by closing the shutter, handle of which appears at left of lower portion of color wheel. The lamp can be moved back and forth in box for focusing purposes, and clamped in position by means of the wing-nut screw underneath box. The knob next to the screw is attached to (hand-feed) lamp, by turning which the carbons can be fed together or separated.

An extra condenser, slide stage, and objective, with front plate and rods, can be added to this Lens Box, and the entire apparatus used as a stereopticon.

If it is preferred to have the Lens Box suspended on a rope let down from the flies, we can furnish a hanging device in place of stand without extra charge.

Cat. No.	Price.
12176 Lens Box, including Rheostat, Stand (or Hanging Device), Color Wheel and Hand-Feed Lamp....	\$100.00
12177 With Automatic Lamp.....	130.00
12178 Extra for Stereopticon Attachment	45.00



### Improved Automatic Electric Lamp for Photo-Engraving, Etc.

A few remarks from those who have tried the lamps and know their value may be of interest to those who have not.

#### The Chicago Tribune.

Editorial Department, Chicago, May 22, 1895.

Gentlemen:—I have had two of your lamps in use for nearly three months, and have been unable to find any fault with them. They are first-class in every respect and save considerable time and give better results than others.

Respectfully,

(Signed) LOUIS RACICOT, Engraver of the Tribune, Chicago.

#### The New York Herald.

New York, February 25, 1895.

Gentlemen:—In reply to your letter of February 16, we beg to say that we will purchase five (5) of your arc lamps for our Photo-Engraving Department, etc.

Very truly yours, JAMES GORDON BENNETT,

Dulany Howland, Supt.

#### The New York World.

Editorial Rooms, Pulitzer Bldg., Park Row, New York, Jan. 30, 1895.

Gentlemen:—Two of your lamps have been in constant use here night and day for the past month and give satisfaction.

Yours respectfully,

GEO. W. MORRISON, Supt. Engraving Dept.

#### The Brooklyn Daily Eagle.

Rooms 29-30, Eagle Bldg., Brooklyn, N. Y., April 22, 1895.

Gentlemen:—Since the installation of your lamp our electric light has ceased to be a cause of trouble; we have proved by practical use its superiority to any other we know of, and cheerfully recommend it to photo-engravers who need a lamp that is perfectly automatic, adjustable and able to work in any position, and—thanks to an ingenious arrangement of the negative carbon holder—always is in a focus with the arc on the right side of the carbons.

A. FIALA, JR., Brooklyn Eagle Art and Engraving Dept.

#### The Gill Engraving Company.

104 Chambers St., New York, January 30, 1895.

Dear Sir:—We are using a good many focusing lamps in our business. Several months ago we put in two of your lamps. They are the most satisfactory lamps that we ever used. We do not care to criticise the lamps of other houses, but in many respects we find your lamps a great improvement, and they are in every way adapted for our business.

Yours very truly,

THE GILL ENGRAVING COMPANY, E. M. Gill, Prest.

#### Moss Engraving Company.

Engravers, Electrotypers and Printers, Puck Bldg., E. Houston and Mulberry Sts. New York, January 30, 1895.

Gentlemen:—It affords us pleasure to state, that after using two of your lamps for over two months we found them the very best we ever used. They are neat in construction, burn steadily, and give a splendid light.

Yours truly, MOSS ENGRAVING CO., J. R. Brown, Secy.

#### The Coloritype Company.

32 and 34 Lafayette Place, New York, Feb. 16, 1895.

Gentlemen:—We take pleasure in stating to you that the two electric lamps with which you supplied us about three months ago, gave us such satisfaction that a short time ago we gave you an order for two more. We find these lamps superior to any others we have used, and the simplicity of their construction makes it easy for the operator to adjust them as may be necessary.

Yours truly,

COLORITYPE COMPANY, W. Kurtz, Prest.

#### The Standard Engraving Company.

61 Ann Street, New York, February 14, 1895.

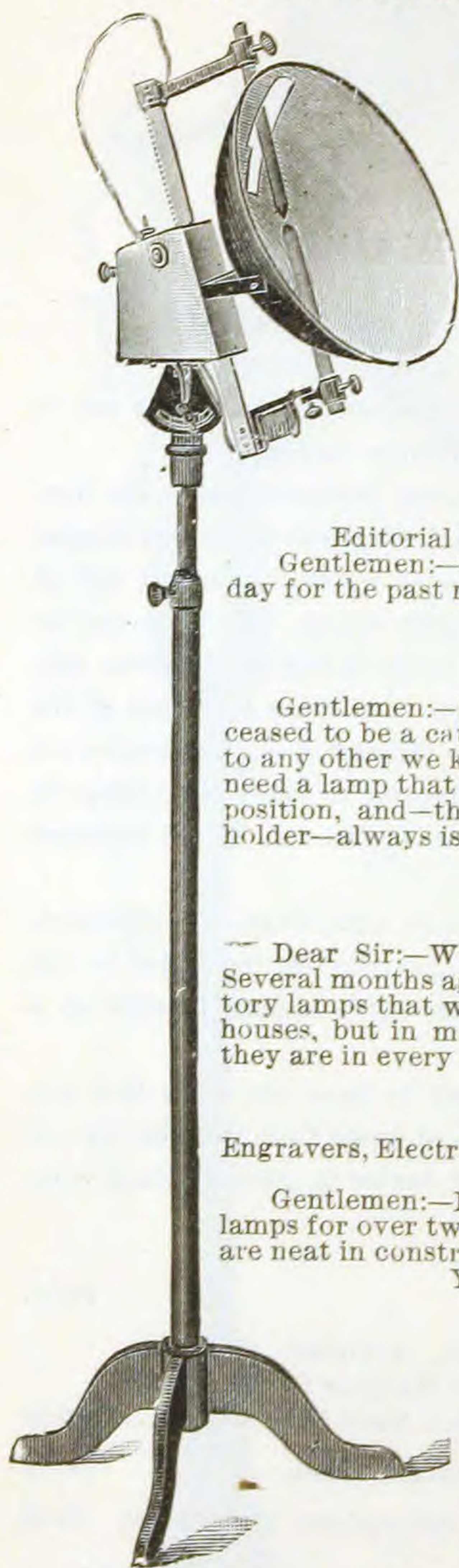
Dear Sirs:—We have been using your lamp for some little time with good satisfaction, and so far it seems superior to any other focusing lamp we have had, particularly as to the steadiness.

Respectfully,

STANDARD ENGRAVING COMPANY.

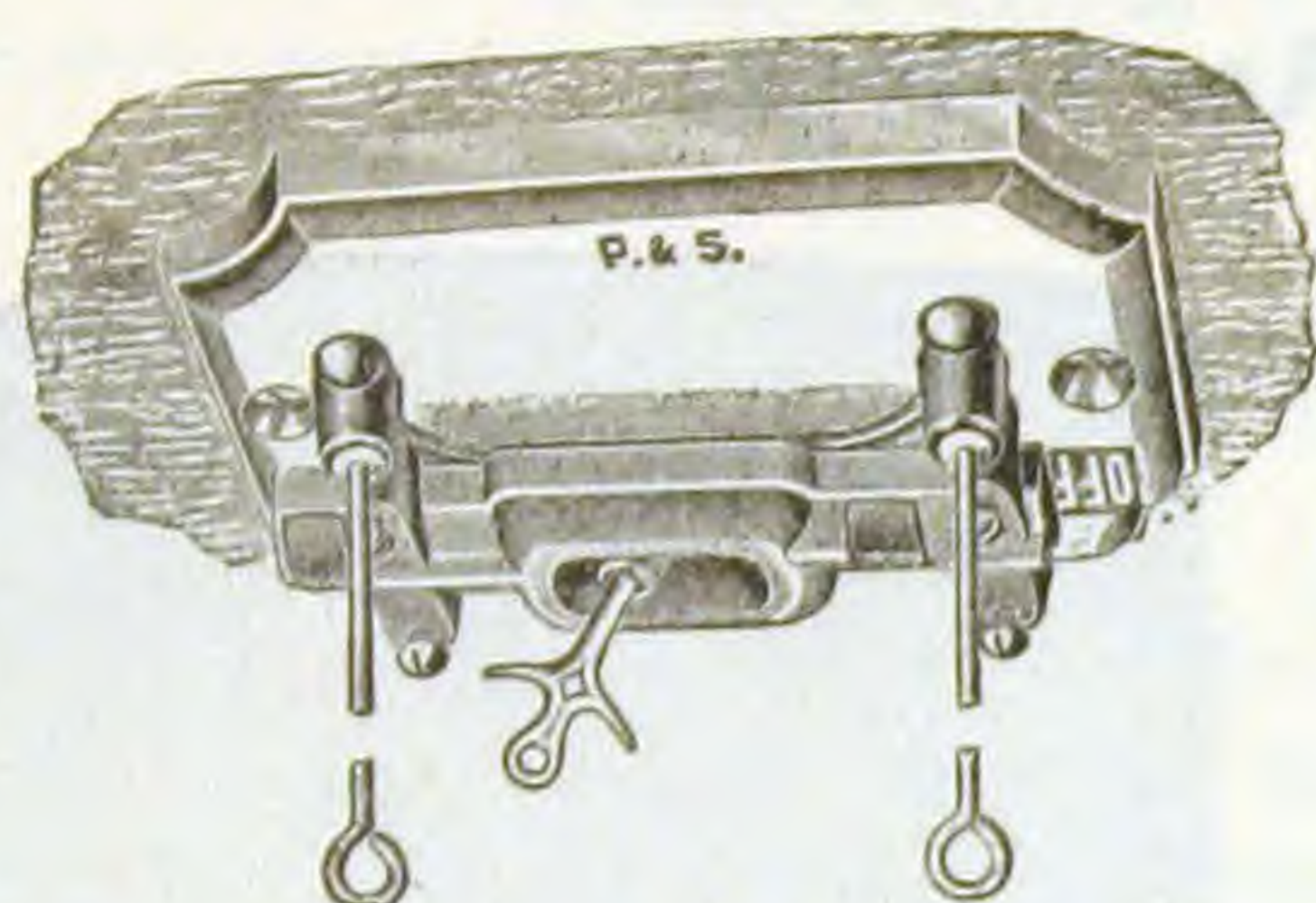
Cat. No. 12179 PHOTO-ENGRAVING LAMP, WITH FIXED RHEOSTAT.....PRICE, \$110.00

In corresponding in regard to these lamps, please state whether current is direct or alternating, and its voltage.



Cat. No. 12179.

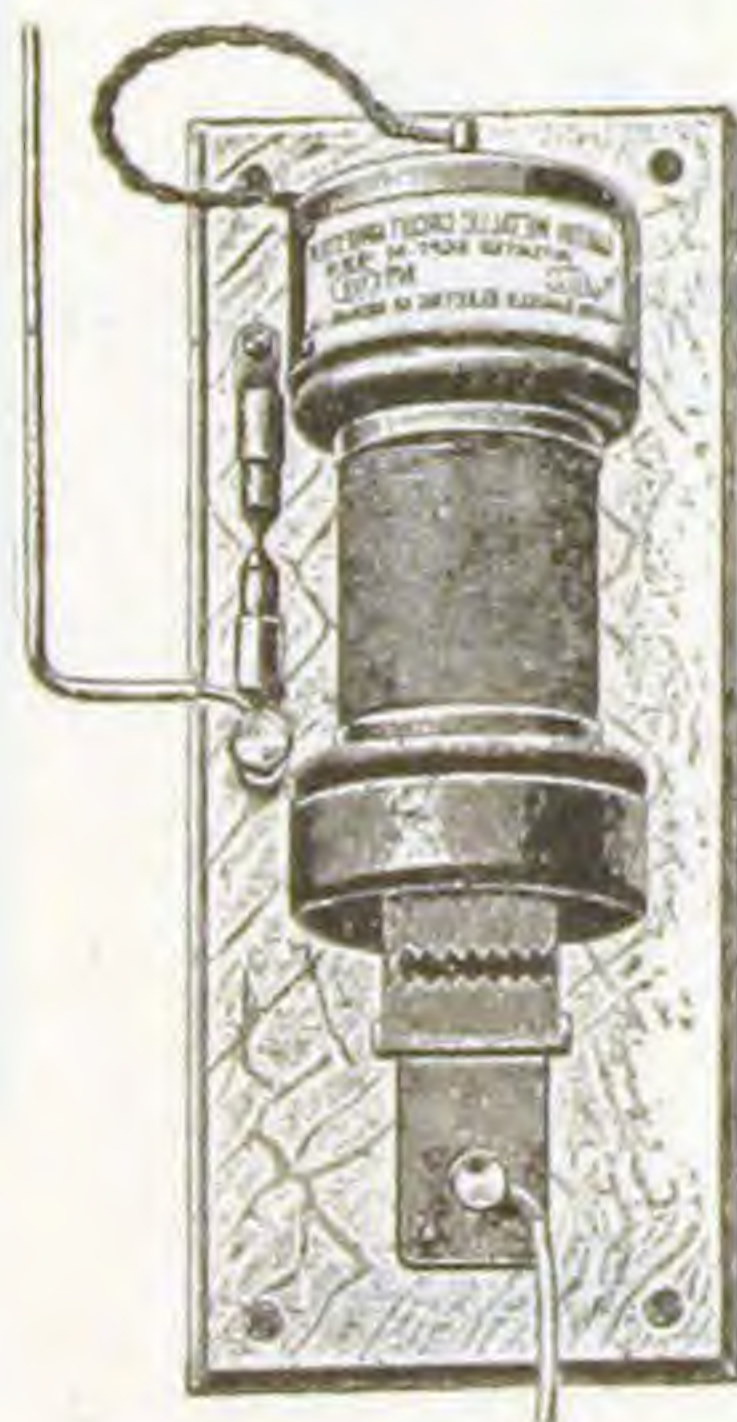




Cat. No. 12180.



Cat. No. 12182.



Cat. No. 12186.

### China Arc Hanging Board.

No. 12180, for series circuits, has an automatic device which closes the circuit if the lamp is disconnected accidentally or otherwise, when the switch is on.

No. 12181 is for incandescent circuits, and the switch is also double pole and breaks in four places.

Cat. No.	Price.
12180	For constant current, series circuit, each, \$3.00
12181	For constant potential, multiple circuits, each . . . . . 3.00

### Wurts Lightning Arrester.

12182	Station Arrester, double-pole, for 1,000 volt alternating current, each . . . . .	18.00
12183	Line Arrester, double-pole, 1,000 volt alternating current, each . . . . .	4.50
12184	Station Arrester, single-pole, 4,000 volt, direct arc current, each . . . . .	8.25
12185	Line Arrester, single-pole, 4,000 volt arc current, each . . . . .	6.00

### Garton Lightning Arrester.

12186	Metallic Circuit Station Arresters, with wooden backs, per pair . . . . .	30.00
12187	Metallic Circuit Station Arresters, with slate or marble backs, per pair . . . . .	40.00
12188	Metallic Circuit Pole Arresters, with waterproof covers, per pair . . . . .	30.00

### Swinging Ball Lightning Arrester.

12189	Each . . . . .	8.00
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### Ajax Lightning Arrester.

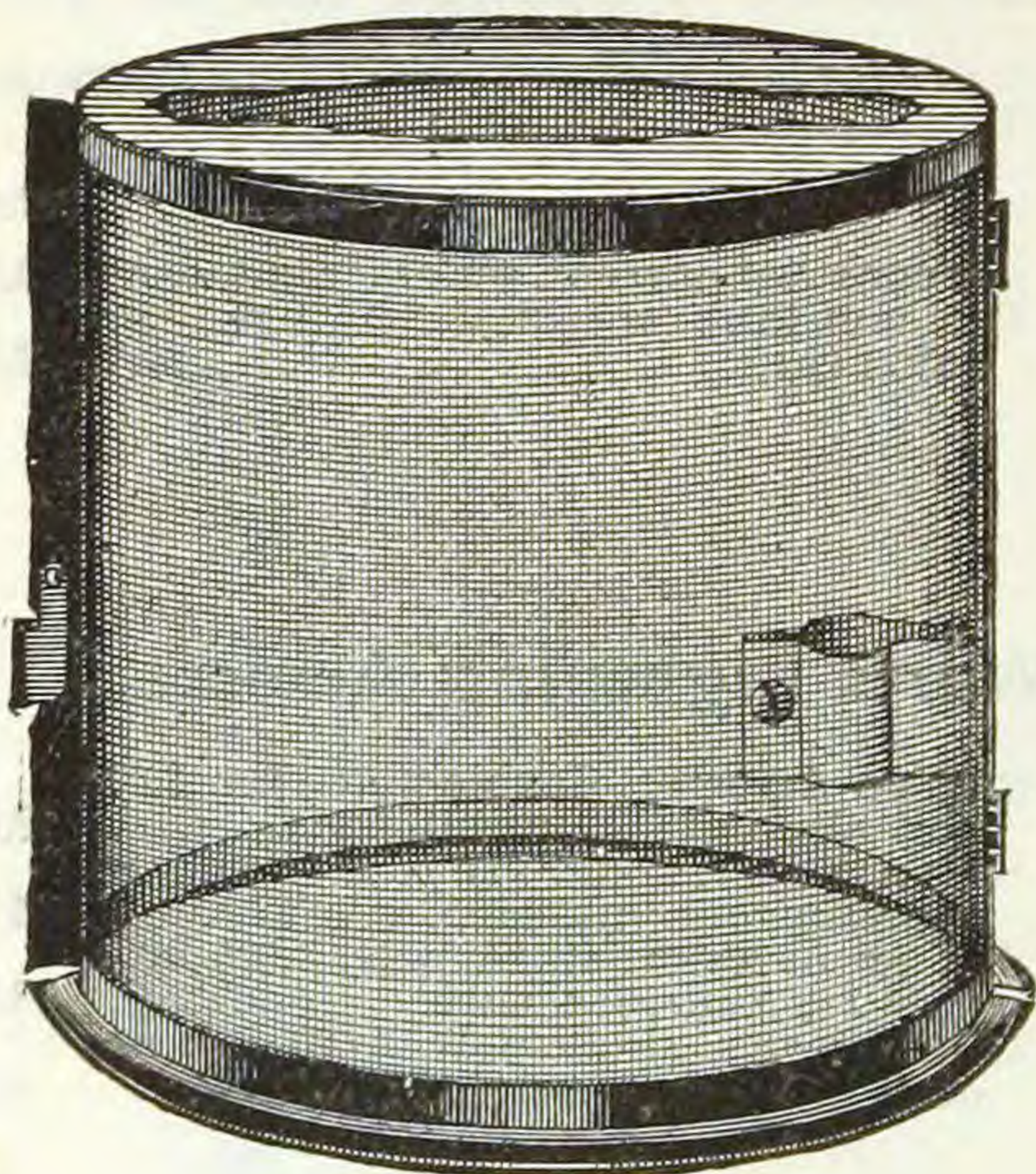
12190	Ajax Arrester, no coil, each . . . . .	8.00
12191	Isolated Plant Type, each . . . . .	10.00
12192	Car Arrester, each . . . . .	14.00
12193	Double Arrester Pole Box, with coil, each, 29.00	
12194	Double Arrester Pole Box, no coil, each, 26.00	
12195	Single Arrester Pole Box, with coil, each, 16.50	
12196	Single Arrester Pole Box, no coil, each . .	14.00
12197	Extra Fuses, per dozen . . . . .	1.00

NOTE.—Above prices include a full complement of Fuses with each Arrester, and wrought iron strap for pole boxes.

In ordering Pole Boxes, please mention whether poles are of wood or iron. If iron, give outside diameter where box will be clamped.



## Spark Arresters for Arc Lamps.



Cat. No. 12198.



Cat. No. 12199.

Cat. No.		Price.
12198	Spark Arrester, with Hinge.....	\$2.00
12199	" " one piece .....	3.00



Cat. No. 12200.

Cat. No.	Price.
12200	Arc Globe Net, copper, each.....\$0.40



Cat. No. 12201.



Cat. No. 12202.

## Carbon Bags.

12201	Tin Carbon Case, each.....	1.25
12202	Extra Heavy Leather Carbon Case, each.....	4.25



## Solid Electric Light Carbons.

Our carbons for high tension systems of from four to ten amperes are an innovation in electric light carbons, being a "Forced" carbon, which enables us to furnish a round, smooth, mechanical finished carbon devoid of the ridge on sides, as is always attendant on the "Mould" carbons.

In addition to being almost mechanically perfect, they are electrically very low resistance, have a longer life than the average "Mould" carbons, give a bright, clear white light, very steady, and little or no dust in the globe.

### HIGH TENSION.

Cat. No.				Price.
12203	$\frac{7}{16}$ x 12	inch, plain, per thousand	.....	\$16.00
12204	$\frac{7}{16}$ x 12	" coppered, "	.....	16.00
12205	$\frac{1}{2}$ x 12	" plain, "	.....	18.00
12206	$\frac{1}{2}$ x 12	" coppered, "	.....	18.00
12207	$\frac{1}{2}$ x 14	" plain, "	.....	22.00
12208	$\frac{1}{2}$ x 14	" coppered, "	.....	22.00
12209	$\frac{5}{8}$ x 12	" plain, "	.....	22.00
12210	$\frac{5}{8}$ x 12	" coppered, "	.....	22.00
12211	$\frac{5}{8}$ x 14	" plain, "	.....	28.00
12212	$\frac{5}{8}$ x 14	" coppered, "	.....	30.00
12213	$\frac{7}{16}$ x 7	" plain, "	.....	9.00
12214	$\frac{7}{16}$ x 7	" coppered, "	.....	9.00
12215	$\frac{1}{2}$ x 7	" plain, "	.....	10.00
12216	$\frac{1}{2}$ x 7	" coppered, "	.....	10.00
12217	$\frac{5}{8}$ x 7	" plain, "	.....	14.00
12218	$\frac{5}{8}$ x 7	" coppered, "	.....	14.00
12219	$\frac{5}{8}$ x 8	" plain, "	.....	14.00
12220	$\frac{5}{8}$ x 8	" coppered, "	.....	14.00

## Special Solid Carbons for Enclosed Arc Lamps.

### 150-Hour Type—Imported.

12221	$\frac{1}{2}$ x 12	inch, per thousand	.....	\$25.20
12222	$\frac{1}{2}$ x 7	" "	.....	14.90
12223	$\frac{1}{2}$ x 5	" "	.....	10.50
12224	$\frac{7}{16}$ x 12	" "	.....	20.50
12225	$\frac{7}{16}$ x $4\frac{3}{4}$	" "	.....	8.10





## CORED CARBONS.

### Cored Upper Carbons.

Cat. No.				Price.
12226	$\frac{3}{8}$ x 12	inch, per thousand.....		\$30.00
12227	$\frac{7}{16}$ x 12	" " .....		32.00
12228	$\frac{1}{2}$ x 12	" " .....		36.00
12229	$\frac{9}{16}$ x 12	" " .....		40.00
12230	$\frac{5}{8}$ x 12	" " .....		46.00
12231	$\frac{3}{8}$ x 7	" " .....		18.00
12232	$\frac{7}{16}$ x 7	" " .....		20.00
12233	$\frac{1}{2}$ x 7	" " .....		24.00
12234	$\frac{9}{16}$ x 7	" " .....		28.00
12235	$\frac{5}{8}$ x 7	" " .....		32.00

### Solid Bottom Carbons to Match Cored Uppers.

12236	$\frac{3}{8}$ x 7	inch, per thousand.....	13.00
12237	$\frac{7}{16}$ x 7	" " .....	14.50
12238	$\frac{1}{2}$ x 7	" " .....	16.00
12239	$\frac{9}{16}$ x 7	" " .....	18.00
12240	$\frac{5}{8}$ x 7	" " .....	21.00

### Carbons for Arc Lamps on Incandescent Circuits.

12241	$\frac{7}{16}$ x 12	inch, hollow treated uppers, per thousand.....	22.00
12242	$\frac{1}{2}$ x 12	" " " " " " .....	23.00

### Solid Negatives to Match Hollow Treated Uppers.

12243	$\frac{7}{16}$ x 12	inch, per thousand.....	16.00
12244	$\frac{1}{2}$ x 12	" " .....	18.00





## Imported "Nurnberg" Carbons.

Highest Grade. Made in Germany.

For Constant Potential Direct Current.

### EIGHT-HOUR CARBONS FOR EITHER "SHORT" OR "BLJOU" LAMPS.

SOFT-CORED UPPERS.				Price.
Cat. No.				
12245	$\frac{7}{16}$ x $7\frac{1}{2}$ inch, per thousand			\$11.50
12246	$\frac{1}{2}$ x $7\frac{1}{2}$ " " "			14.00
12247	$\frac{9}{16}$ x $7\frac{1}{2}$ " " "			15.00
12248	$\frac{5}{8}$ x $7\frac{1}{2}$ " " "			21.25

#### SOLID LOWERS.

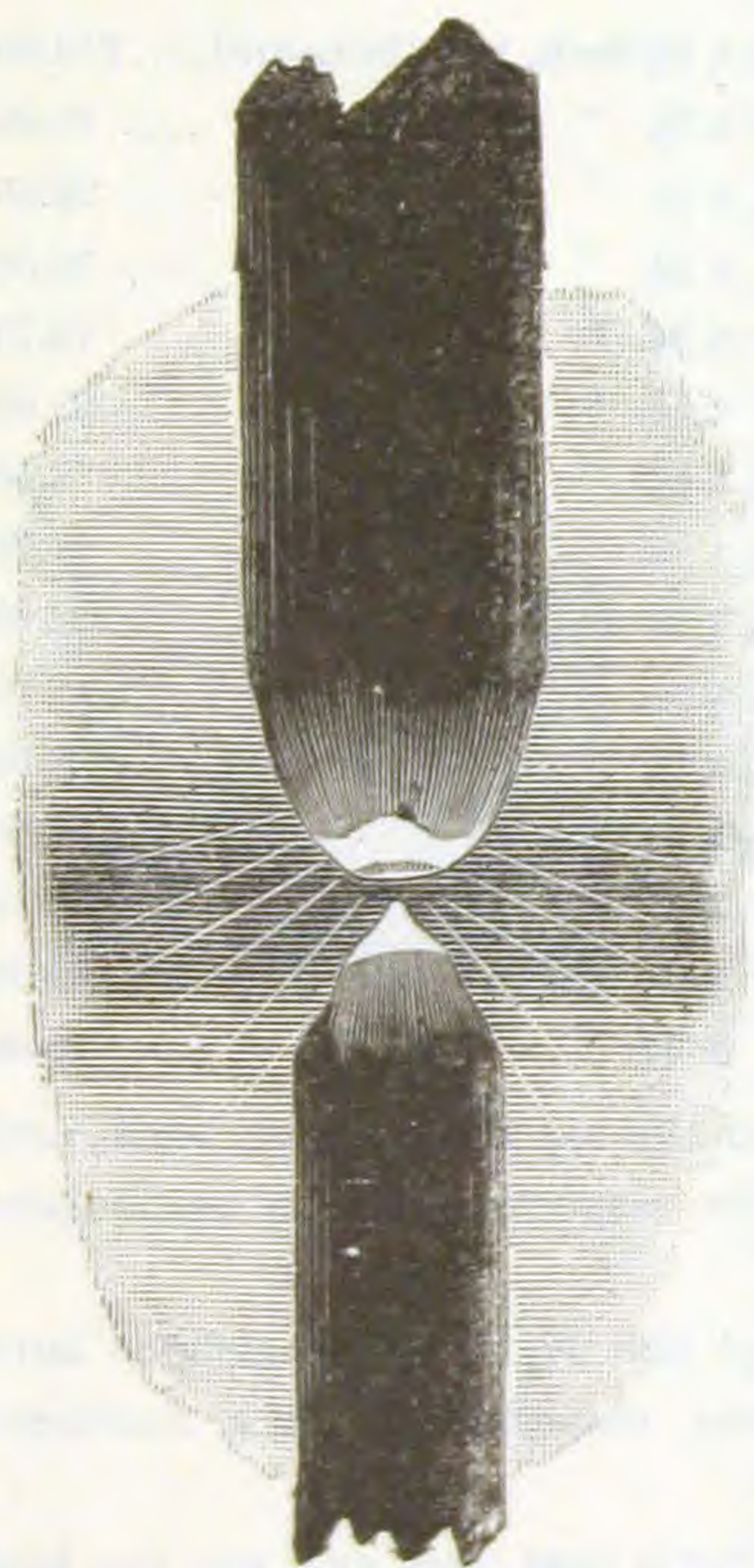
12249	$\frac{5}{16}$ x 6 inch, per thousand			5.50
12250	$\frac{3}{8}$ x 6 " " "			7.25
12251	$\frac{7}{16}$ x 6 " " "			8.25
12252	$\frac{1}{2}$ x 6 " " "			10.00

### ELEVEN-HOUR CARBONS FOR EITHER "STANDARD" OR REGULAR "CHAIN" LAMPS.

12253	$\frac{7}{16}$ x 10 inch, per thousand			15.50
12254	$\frac{1}{2}$ x 10 " " "			18.75
12255	$\frac{9}{16}$ x 10 " " "			20.25
12256	$\frac{5}{8}$ x 10 " " "			27.25
12257	$\frac{5}{16}$ x $7\frac{1}{2}$ inch, per thousand			6.90
12258	$\frac{3}{8}$ x $7\frac{1}{2}$ " " "			9.25
12259	$\frac{7}{16}$ x $7\frac{1}{2}$ " " "			10.40
12260	$\frac{1}{2}$ x $7\frac{1}{2}$ " " "			12.75

### FOURTEEN-HOUR CARBONS FOR "LONG" LAMPS.

12261	$\frac{7}{16}$ x 12 inch, per thousand			18.50
12262	$\frac{1}{2}$ x 12 " " "			22.25
12263	$\frac{9}{16}$ x 12 " " "			24.25
12264	$\frac{5}{8}$ x 12 " " "			33.50
12265	$\frac{5}{16}$ x $9\frac{1}{2}$ inch, per thousand			8.75
12266	$\frac{3}{8}$ x $9\frac{1}{2}$ " " "			11.75
12267	$\frac{7}{16}$ x $9\frac{1}{2}$ " " "			13.10
12268	$\frac{1}{2}$ x $9\frac{1}{2}$ " " "			16.10
12269	$\frac{9}{16}$ x 7 " " "			13.50





## Imported "Nurnberg" Carbons.

FOR ALTERNATING CURRENT.

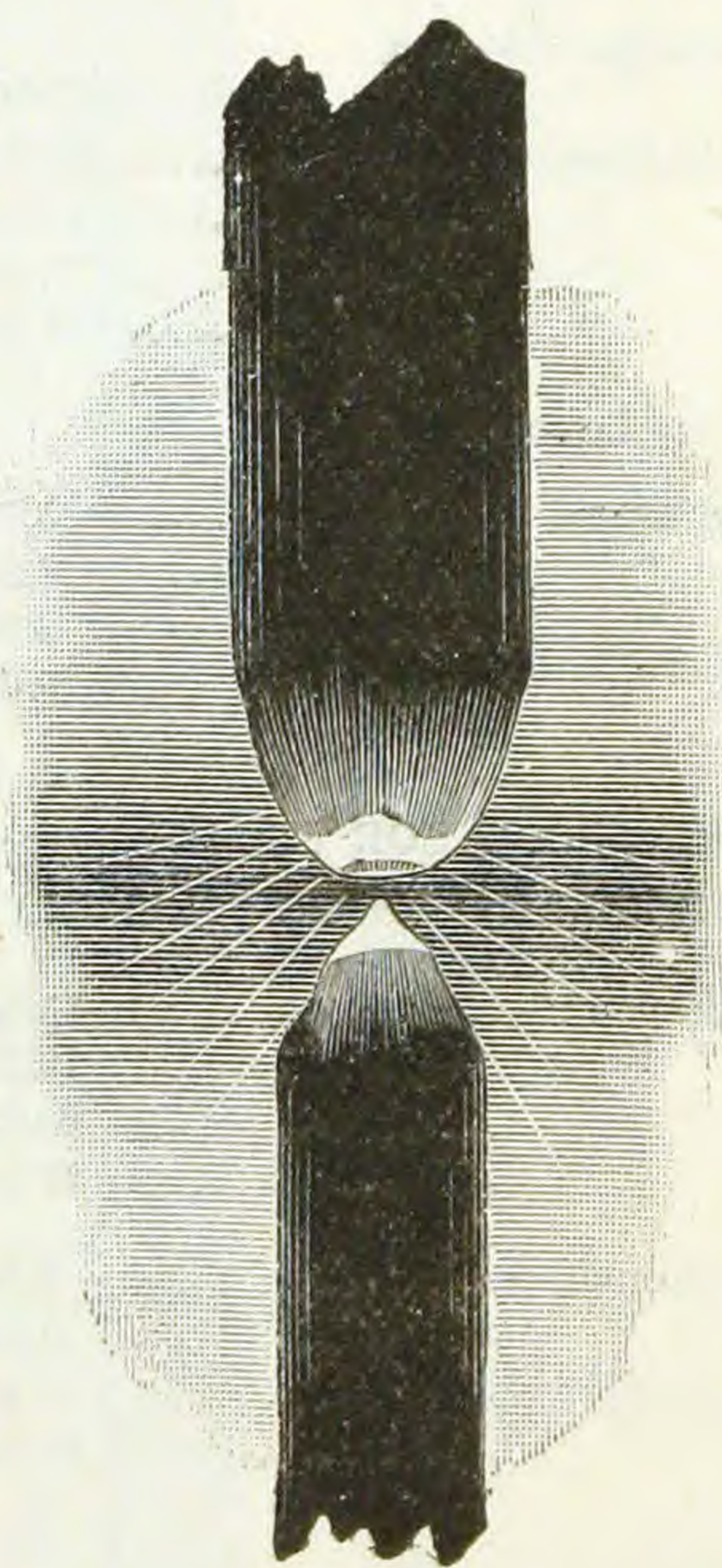
SOFT CORED.

Cat. No.					Price.
12270	160 x 13 mm.,	$6\frac{1}{4}$ x $\frac{1}{2}$ inch,	per thousand	....	\$14.60
12271	160 x 15 "	$6\frac{1}{4}$ x $\frac{5}{8}$ "	" "	....	18.25
12272	160 x 16 "	$6\frac{1}{4}$ x $\frac{3}{4}$ "	" "	....	22.50
12273	175 x 13 "	7 x $\frac{1}{2}$ "	" "	....	16.00
12274	175 x 15 "	7 x $\frac{5}{8}$ "	" "	....	19.75
12275	175 x 16 "	7 x $\frac{3}{4}$ "	" "	....	25.00
12276	190 x 13 "	$7\frac{1}{2}$ x $\frac{1}{2}$ "	" "	....	17.50
12277	190 x 15 "	$7\frac{1}{2}$ x $\frac{5}{8}$ "	" "	....	21.75
12278	190 x 16 "	$7\frac{1}{2}$ x $\frac{3}{4}$ "	" "	....	27.00
12279	240 x 13 "	$9\frac{1}{2}$ x $\frac{1}{2}$ "	" "	...	22.00
12280	240 x 15 "	$9\frac{1}{2}$ x $\frac{5}{8}$ "	" "	....	28.00
12281	240 x 16 "	$9\frac{1}{2}$ x $\frac{3}{4}$ "	" "	....	34.00
12282	255 x 13 "	10 x $\frac{1}{2}$ "	" "	....	23.50
12283	255 x 15 "	10 x $\frac{5}{8}$ "	" "	....	29.25
12284	255 x 16 "	10 x $\frac{3}{4}$ "	" "	...	36.00

The  $7\frac{1}{2}$  x  $\frac{1}{2}$  inch and the  $9\frac{1}{2}$  x  $\frac{1}{2}$  inch carbons burn eight and twelve hours, respectively, in a ten-ampere lamp.

The  $7\frac{1}{2}$  x  $\frac{5}{8}$  inch and the  $9\frac{1}{2}$  x  $\frac{5}{8}$  inch carbons burn eight and twelve hours, respectively, in a fourteen-ampere lamp.

These carbons are strictly first-class and are the best imported carbon brought to this market, being far superior to any other importation. They are guaranteed to give satisfaction.





## Carbon Brushes.

Cat. No.	Length.	Width.	Thickness.	Price per 100.
12285	2 $\frac{1}{4}$	2 $\frac{1}{4}$	$\frac{5}{8}$	\$9.00
12286	2 $\frac{1}{4}$	2 $\frac{1}{4}$	$\frac{1}{2}$	8.50
12287	2 $\frac{1}{4}$	2	$\frac{1}{2}$	8.00
12288	1 $\frac{3}{4}$	2 $\frac{1}{4}$	$\frac{1}{2}$	8.00
12289	2 $\frac{1}{4}$	2 $\frac{7}{8}$	$\frac{1}{2}$	8.50
12290	2 $\frac{1}{2}$	2 $\frac{7}{8}$	$\frac{1}{2}$	8.50
12291	2 $\frac{1}{2}$	2 $\frac{1}{4}$	$\frac{1}{2}$	8.50
12292	1 $\frac{3}{4}$	2 $\frac{5}{4}$	1	10.50
12293	3 $\frac{1}{2}$	2 $\frac{1}{4}$	$\frac{5}{8}$	10.50
12294	2 $\frac{1}{2}$	1 $\frac{3}{4}$	$\frac{1}{2}$	8.00
12295	2	1 $\frac{3}{4}$	$\frac{1}{2}$	8.00
12296	2 $\frac{1}{8}$	1 $\frac{5}{8}$	$\frac{1}{2}$	8.00
12297	1 $\frac{7}{8}$	1 $\frac{5}{8}$	$\frac{1}{2}$	8.00
12298	2 $\frac{1}{2}$	4 $\frac{1}{4}$	1 $\frac{3}{4}$	16.00
12299	2 $\frac{1}{2}$	3 $\frac{3}{4}$	1 $\frac{1}{8}$	15.00
12300	2 $\frac{3}{4}$	2 $\frac{3}{8}$	$\frac{1}{2}$	8.50
12301	2 $\frac{3}{4}$	2 $\frac{3}{8}$	1	11.00
12302	3 $\frac{3}{4}$	2 $\frac{5}{8}$	1 $\frac{1}{8}$	14.50
12303	3 $\frac{3}{4}$	2 $\frac{1}{4}$	1 $\frac{1}{8}$	14.50
12304	3 $\frac{3}{4}$	2 $\frac{1}{4}$	$\frac{3}{4}$	12.50
12305	2	2	$\frac{1}{2}$	8.00
12306	2	2	$\frac{7}{8}$	8.00
12307	6	$\frac{1}{2}$	$\frac{3}{8}$	13.00
12308	6	$\frac{1}{2}$	$\frac{1}{4}$	13.00
12309	6	$\frac{3}{4}$	$\frac{3}{8}$	14.00
12310	6	$\frac{3}{4}$	$\frac{1}{4}$	14.00
12311	6	$\frac{7}{8}$	$\frac{1}{4}$	14.00
12312	6	1	$\frac{1}{4}$	15.00
12313	6	1 $\frac{1}{8}$	$\frac{1}{4}$	16.50
12314	6	1 $\frac{1}{4}$	$\frac{1}{4}$	16.50
12315	6	1 $\frac{1}{4}$	$\frac{5}{8}$	16.50
12316	7	1 $\frac{1}{4}$	$\frac{1}{4}$	16.50
12317	7	1 $\frac{1}{2}$	$\frac{3}{8}$	18.00
12318	7	1 $\frac{1}{2}$	$\frac{1}{2}$	18.00
12319	8	1 $\frac{1}{4}$	$\frac{1}{4}$	18.00
12320	8	1 $\frac{1}{2}$	$\frac{1}{4}$	18.00
12321	8	1 $\frac{1}{2}$	$\frac{1}{2}$	18.00
12322	9	$\frac{5}{8}$	$\frac{3}{8}$	14.00
12323	12	$\frac{3}{4}$	$\frac{3}{4}$	20.00
12324	9	$\frac{5}{8}$	$\frac{1}{4}$	14.00
12325	6	$\frac{1}{2}$	$\frac{1}{8}$	13.00
12326	4	1	$\frac{3}{8}$	9.00
12327	8	2	$\frac{1}{2}$	16.50
12328	8	2 $\frac{1}{2}$	$\frac{1}{2}$	20.00





## Wire Gauze Dynamo Brush.

PURE COPPER GAUZE BRUSHES.



Cat. No.	In. wide.	In. thick.	In. long.	Price each.	Cat. No.	In. wide.	In. thick.	In. long.	Price each.
12329	1/2	3/16	6	\$0.75	12374	1 5/8	1/2	7	\$3.00
12330	1/2	1/4	6	.80	12375	1 3/4	3/16	8	2.20
12331	5/8	3/16	6	.93	12376	1 3/4	1/4	8	2.35
12332	3/4	1/4	7	1.25	12377	1 3/4	5/16	8	2.40
12333	3/4	1/2	7	1.50	12378	1 3/4	3/8	8	2.50
12334	7/8	1/8	6	1.00	12379	1 3/4	1/2	8	3.25
12335	7/8	3/16	6	1.25	12380	1 3/4	5/8	8	3.50
12336	7/8	1/4	7	1.35	12381	1 3/4	3/4	8	4.00
12337	7/8	3/8	7	1.50	12382	1 3/4	7/8	8	4.50
12338	7/8	1/2	7	1.75	12383	1 7/8	1/8	8	2.00
12339	1	1/8	7	1.30	12384	1 7/8	3/16	8	2.25
12340	1	3/16	7	1.35	12385	1 7/8	1/4	8	2.50
12341	1	1/4	7	1.50	12386	1 7/8	5/16	8	2.65
12342	1	5/16	7	1.60	12387	1 7/8	3/8	8	2.75
12343	1	3/8	7	1.70	12388	1 7/8	5/8	12	7.50
12344	1	1/2	7	2.00	12389	2	3/16	8	2.40
12345	1 1/8	1/8	7	1.40	12390	2	1/4	8	2.60
12346	1 1/8	3/16	7	1.50	12391	2	5/16	8	2.75
12347	1 1/8	1/4	7	1.60	12392	2	3/8	8	3.00
12348	1 1/8	5/16	7	1.75	12393	2	1/2	8	3.75
12349	1 1/8	3/8	7	1.90	12394	2	5/8	8	4.50
12350	1 1/8	1/2	7	2.15	12395	2 1/8	1/4	8	3.10
12351	1 1/4	1/8	7	1.50	12396	2 1/8	3/8	8	3.30
12352	1 1/4	1/4	7	1.75	12397	2 1/8	1/2	8	4.00
12353	1 1/4	5/16	7	1.85	12398	2 1/4	3/8	8	3.50
12354	1 1/4	3/8	7	1.95	12399	2 1/4	1/2	8	4.25
12355	1 1/4	7/16	7	2.15	12400	2 1/4	5/8	8	5.00
12356	1 1/4	1/2	7	2.30	12401	2 1/2	5/16	8	3.50
12357	1 5/16	1/4	7	1.80	12402	2 1/2	3/8	8	4.00
12358	1 5/16	9/16	7	2.50	12403	2 1/2	1/2	8	4.75
12359	1 3/8	3/16	7	1.75	12404	2 1/2	5/8	8	5.50
12360	1 3/8	1/4	7	1.85	12405	2 7/8	3/8	8	4.75
12361	1 3/8	5/16	7	1.95	12406	2 7/8	1/2	8	5.50
12362	1 3/8	3/8	7	2.20	12407	2 7/8	5/8	8	6.25
12363	1 3/8	1/2	7	2.50	12408	3	3/8	8	5.00
12364	1 7/8	1/4	7	1.90	12409	3	1/2	8	5.75
12365	1 1/2	1/4	7	2.00	12410	3	5/8	8	6.50
12366	1 1/2	5/16	7	2.15	12411	3	3/4	8	7.50
12367	1 1/2	3/8	7	2.30	12412	3 3/8	1/4	8	4.75
12368	1 1/2	1/2	7	2.75	12413	3 3/8	5/16	8	5.25
12369	1 1/2	5/8	7	3.00	12414	3 3/8	3/8	8	5.75
12370	1 5/8	3/16	7	2.15	12415	3 3/8	1/2	8	6.50
12371	1 5/8	1/4	7	2.25	12416	3 3/8	5/8	8	7.50
12372	1 5/8	5/16	7	2.35	12417	3 3/8	3/4	8	8.50
12373	1 5/8	3/8	7	2.65					

Any size of Brush made to order. We can furnish Brushes of Brass Gauze if desired, or Brass and Copper combined, if so ordered.

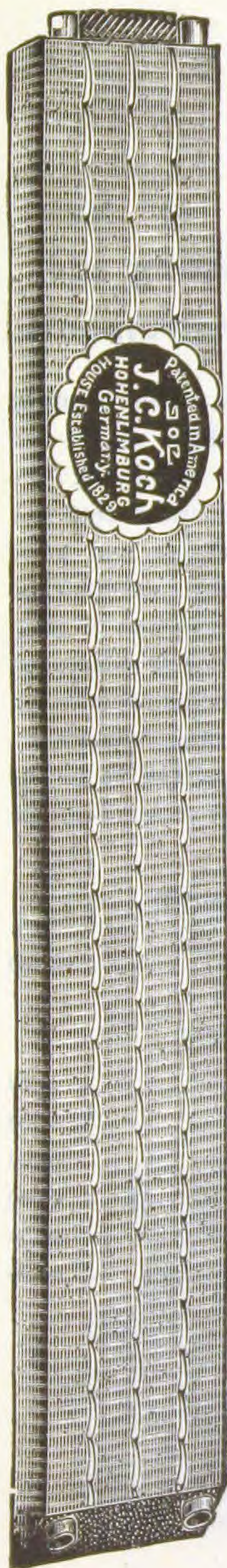


## "Koch" Woven Wire Dynamo Brushes.

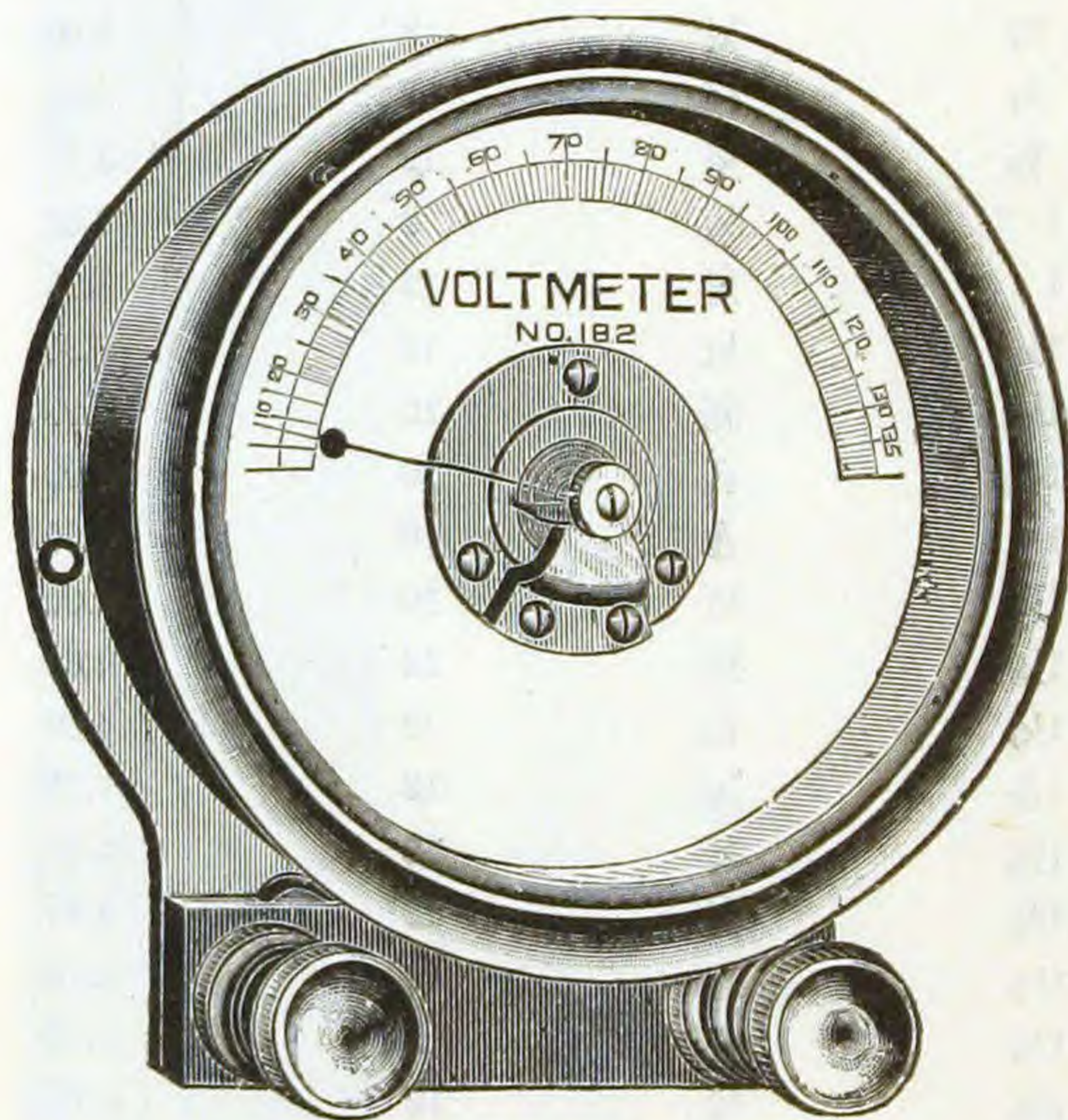
The following sizes are carried in stock.

Cat. No.	Width.	Thickness.	Length.	Price.
12418	$\frac{7}{8}$	$\frac{1}{4}$	10	\$1.65
12419	$\frac{5}{8}$	$\frac{1}{4}$	12	2.40
12420	$\frac{3}{4}$	$\frac{1}{4}$	8	2.00
12421	$\frac{3}{4}$	$\frac{1}{4}$	12	3.00
12422	$\frac{7}{8}$	$\frac{1}{4}$	12	3.28
12423	1	$\frac{1}{4}$	8	2.50
12424	1	$\frac{1}{4}$	12	3.75
12425	$1\frac{1}{8}$	$\frac{1}{4}$	12	4.30
12426	$1\frac{1}{8}$	$\frac{3}{8}$	12	4.90
12427	$1\frac{3}{8}$	$\frac{5}{16}$	10	4.00
12428	$1\frac{1}{4}$	$\frac{3}{16}$	10	4.00
12429	$1\frac{1}{4}$	$\frac{1}{4}$	10	4.00
12430	$1\frac{1}{4}$	$\frac{1}{4}$	12	4.80
12431	$1\frac{1}{4}$	$\frac{5}{16}$	12	4.80
12432	$1\frac{5}{8}$	$\frac{1}{2}$	12	7.15
12433	$1\frac{3}{8}$	$\frac{1}{4}$	12	5.25
12434	$1\frac{3}{8}$	$\frac{3}{8}$	12	5.80
12435	$1\frac{1}{2}$	$\frac{3}{2}$	12	5.70
12436	$1\frac{1}{2}$	$\frac{5}{16}$	12	5.70
12437	$1\frac{3}{4}$	$\frac{1}{4}$	12	6.75
12438	$1\frac{3}{4}$	$\frac{5}{16}$	12	6.75
12439	$1\frac{1}{2}$	$\frac{3}{8}$	12	7.60
12440	$1\frac{1}{2}$	$\frac{5}{8}$	12	12.60
12441	$1\frac{7}{8}$	$\frac{3}{8}$	12	8.00
12442	2	$\frac{1}{4}$	12	7.75
12443	$2\frac{1}{4}$	$\frac{5}{16}$	12	8.75

With or without tubes as desired.







Cat. No. 12444.

## Station Testing and Measuring Instruments.

These instruments possess points of superiority which have gained for them an excellent reputation. We claim durability, accuracy, economy of power, deadbeatness and good finish. They are of the magnetic vane type. The principle is that of magnetic repulsion, which is controlled by a spring of great permanency, by means of a large air vane of aluminum. High resistance is aimed at in the voltmeter and low resistance in the ammeters.

### VOLTMETER.

Cat. No.	Price.
12444 0-135 Volts.....	\$32.00

### AMMETER.

12445 0- 50 Amperes...	24.00
12446 0- 75       "	26.00
12447 0-100       "	32.00
12448 0-150       "	38.00
12449 0-200       "	44.00
12450 0-300       "	46.00

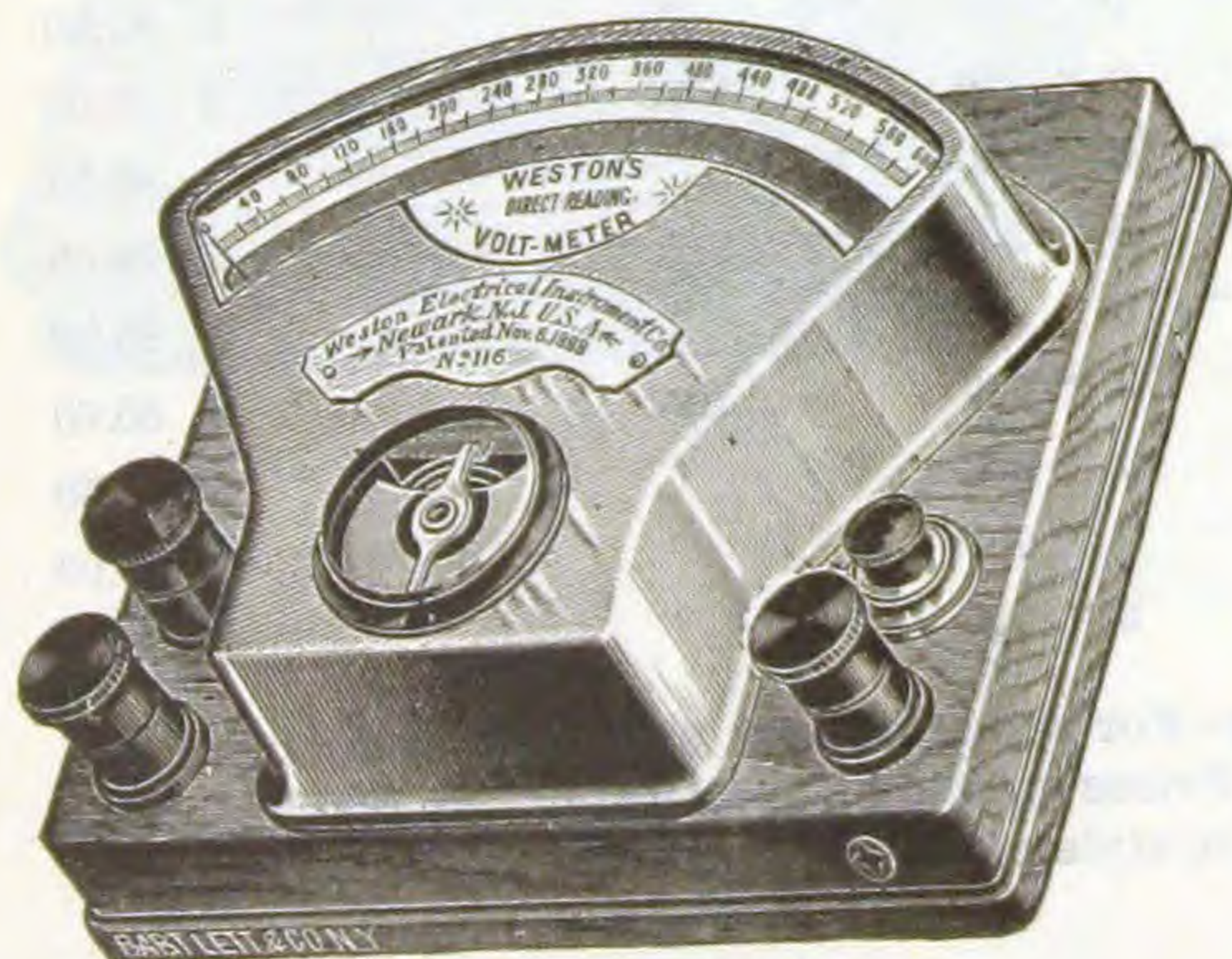


### Weston Standard Portable Direct Reading Voltmeters.

The following is a list of the Standard Voltmeters kept in stock. Calibrating coils and contact keys are attached to instruments only when so stated. The scales for these instruments are of uniform length, and are divided into 100, 120 or 150 parts, the value of each division being the proportional part of the maximum scale value.

Instruments provided with contact key can be kept permanently in circuit by depressing the key and giving it a quarter turn. All instruments reading above 150 volts are provided with rubber covered binding posts.

Cat. No.	Price.
12451 No. 1. Scale 0 to 150 volts by single volt divisions, readable to tenths, each.....	\$55.00
12452 No. 2. Scale 0 to 150 volts by single volt divisions, readable to tenths, contact key and calibrating coil, each....	60.00
12453 No. 3. Scale 0 to 150 volts, and 0 to 5 volts; scale of double values with a ratio of 30. Each division on upper scale values is one volt, readable to tenths; each division on lower scale values $\frac{1}{30}$ of a volt, readable to $\frac{1}{300}$ ; contact key, each.....	75.00
12454 No. 3 $\frac{1}{2}$ . Scale 0 to 150 volts, and 0 to 3 volts; scale of double values with a ratio of 50. Each division on upper scale values is one volt, readable to tenths; each division on lower scale values $\frac{1}{50}$ of a volt, readable to $\frac{1}{500}$ ; contact key, each.....	60.00
12455 No. 4. Scale 0 to 150 volts, and 0 to 15 volts; scale of double values with ratio of 10. Each division on upper scale values is one volt, readable to tenths; each division on lower scale values is $\frac{1}{10}$ of a volt, readable to $\frac{1}{100}$ ; contact key, each.....	75.00
12456 No. 5. Scale 0 to 300 volts by 2 volt divisions, readable to $\frac{1}{2}$ volt; circuit key and calibrating coil, each.....	65.00
12457 No. 6. Scale 0 to 450 volts by 3 volt divisions, readable to $\frac{1}{3}$ volt; contact key and calibrating coil, each.....	70.00
12458 No. 7. Scale 0 to 600 volts by 5 volt divisions, readable to $\frac{1}{5}$ volt, each.....	65.00
12459 No. 8. Scale 0 to 600 volts by 5 volt divisions, readable to $\frac{1}{2}$ volt; contact key and calibrating coil, each.....	70.00

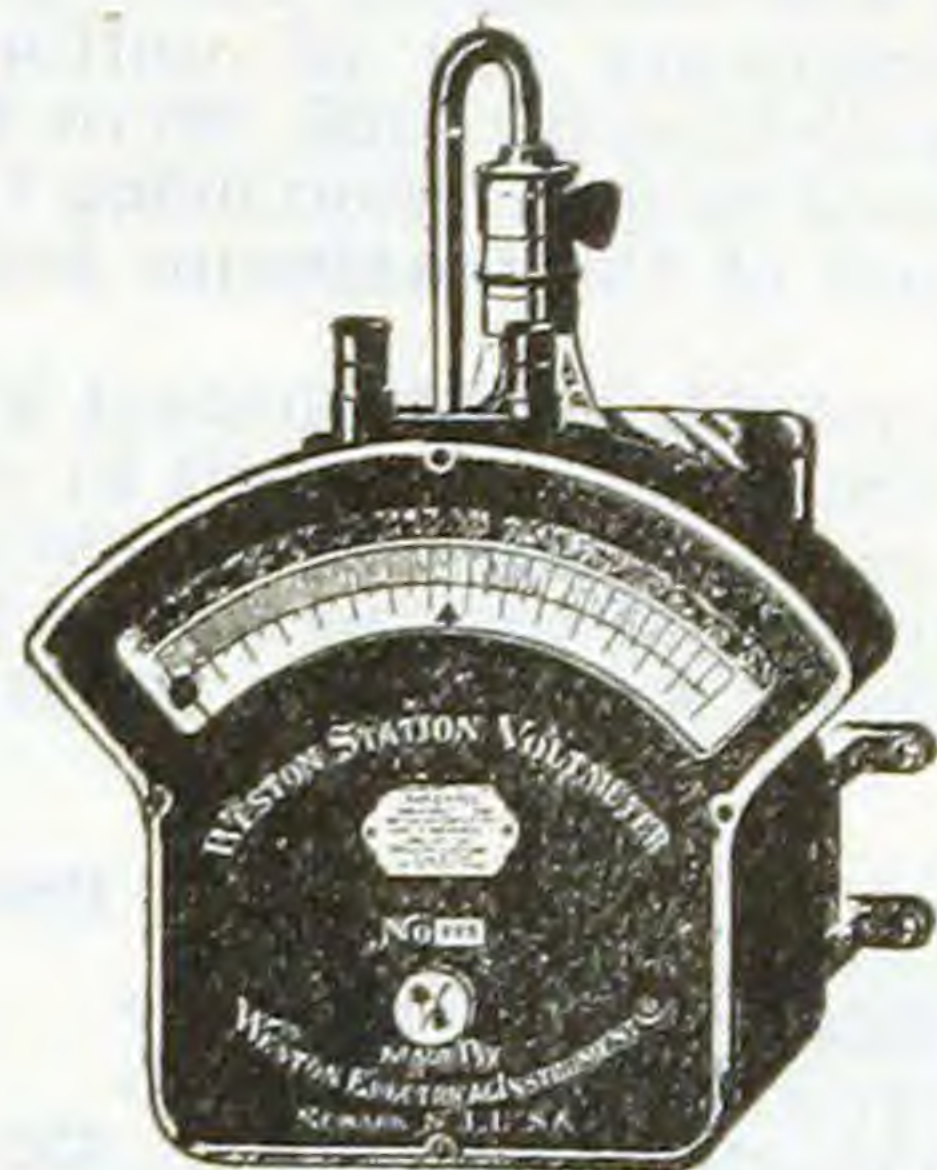


Cat. No. 12459.



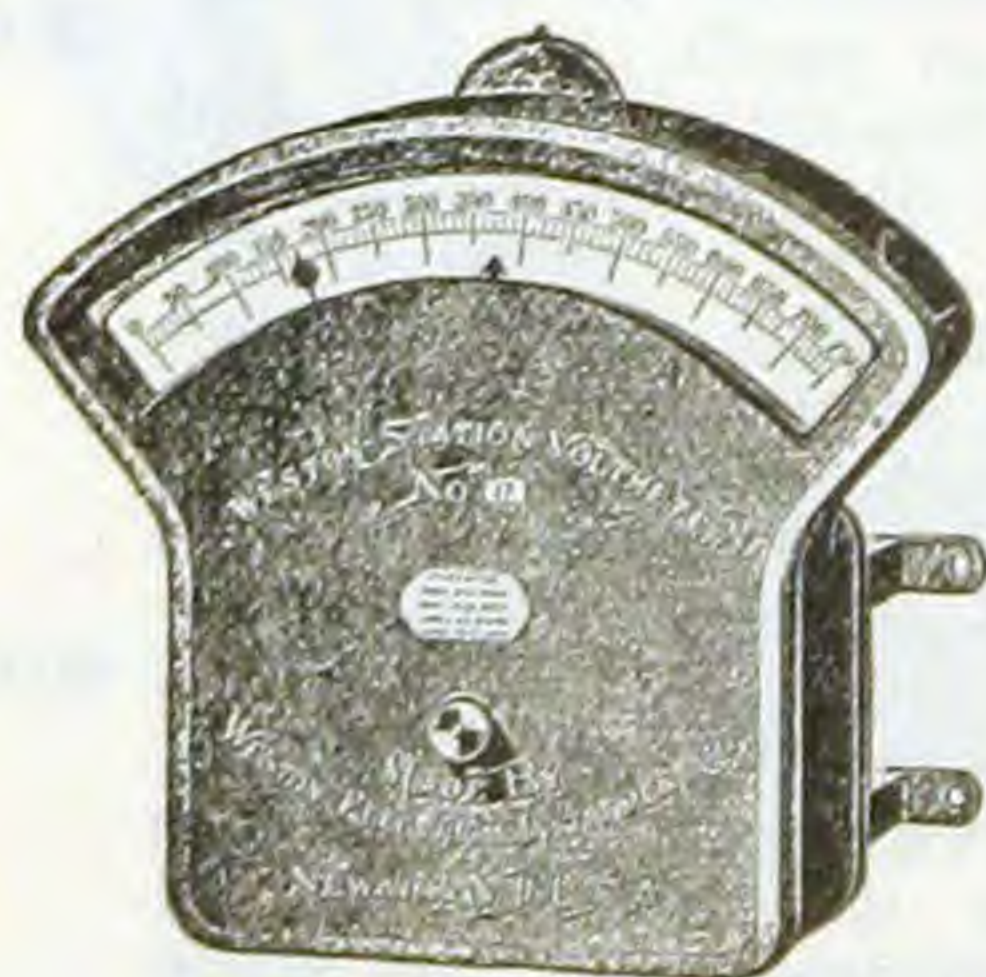
## Weston Illuminated Dial Station Voltmeters.

STYLE "A," OR SMALLER SIZED.

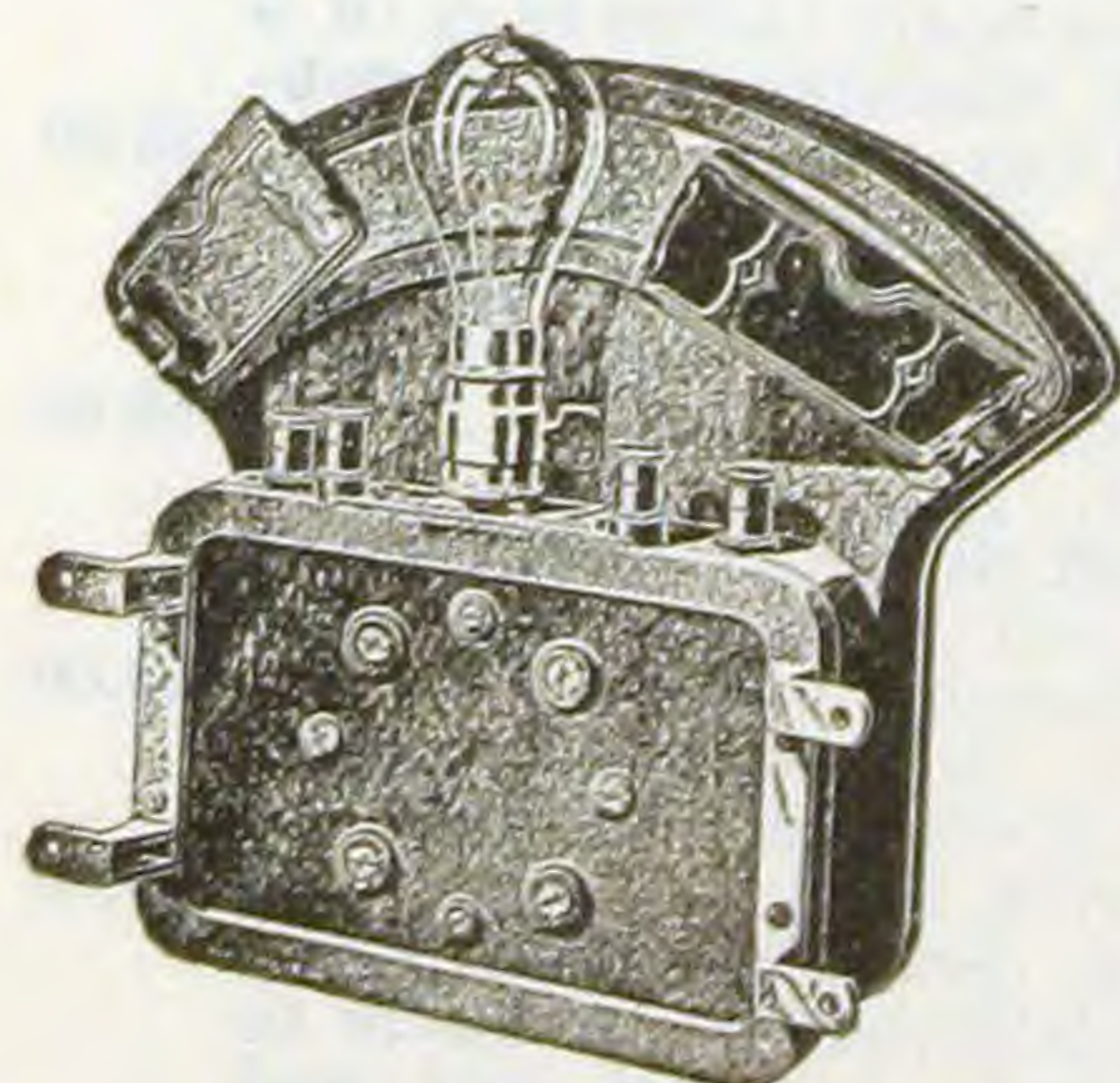


No. 12460.

Cat. No.						Finish.	Price.
12460	Scale 0 to 85 volts in single volt divs.,	No. 2	\$55.00				
12461	" 0 " 85	"	"	"	"	3	57.50
12462	" 0 " 100	"	"	"	"	2	56.00
12463	" 0 " 100	"	"	"	"	3	58.50
12464	" 0 " 125	"	"	"	"	2	58.00
12465	" 0 " 125	"	"	"	"	3	60.50
12466	" 0 " 135	"	"	"	"	2	60.00
12467	" 0 " 135	"	"	"	"	3	62.50
12468	" 0 " 150	"	"	"	"	2	62.00
12469	" 0 " 150	"	"	"	"	3	64.50
12470	" 0 " 250	"	two	"	"	2	64.00
12471	" 0 " 250	"	"	"	"	3	66.50
12472	" 0 " 300	"	"	"	"	2	66.00
12473	" 0 " 300	"	"	"	"	3	68.50



No. 12487.—Front.



No. 12487.—Rear.

STYLE "B," OR LARGER SIZED.

12474	Scale 0 to 125 volts in single volt divis.	No. 2	\$75.00				
12475	" 0 " 125	"	"	"	"	3	79.50
12476	" 0 " 150	"	"	"	"	2	76.00
12477	" 0 " 150	"	"	"	"	3	80.50
12478	" 0 " 175	"	"	"	"	2	77.00
12479	" 0 " 175	"	"	"	"	3	81.50
12480	" 0 " 250	"	two	"	"	2	78.00
12481	" 0 " 250	"	"	"	"	3	82.50
12482	" 0 " 300	"	"	"	"	2	79.00
12483	" 0 " 300	"	"	"	"	3	83.50
12484	" 0 " 600	"	five	"	"	2	80.00
12485	" 0 " 600	"	"	"	"	3	84.50
12486	" 0 " 750	"	"	"	"	2	81.00
12487	" 0 " 750	"	"	"	"	3	85.50

NOTE—For higher ranges, extra multipliers are furnished. Prices quoted on application. In placing order, please give style of lamp socket.



### Volt Ammeters.

It is frequently of great advantage to be able to determine the amount of current used, as well as the voltage employed, as is the case when testing incandescent lamps or in determining the internal resistance of telegraph batteries. Where the current is small it is quite possible to combine the two instruments in one with excellent results, provided the proper care is taken to avoid making a wrong connection when using the instrument.

Cat. No.

Price.

12487½	No. 1. Scales 0 to 150 volts and 0 to 1.5 amperes, reading to 150 volts by single volt divisions, or to 1½ amperes by $\frac{1}{100}$ ampere divisions, each.....	\$75.00
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Other combinations will be made on special order, but they are not recommended in connection with high voltage or heavy currents.

## Weston Standard Direct Reading Milliammeters and Ammeters.

## MIL AMMETERS.

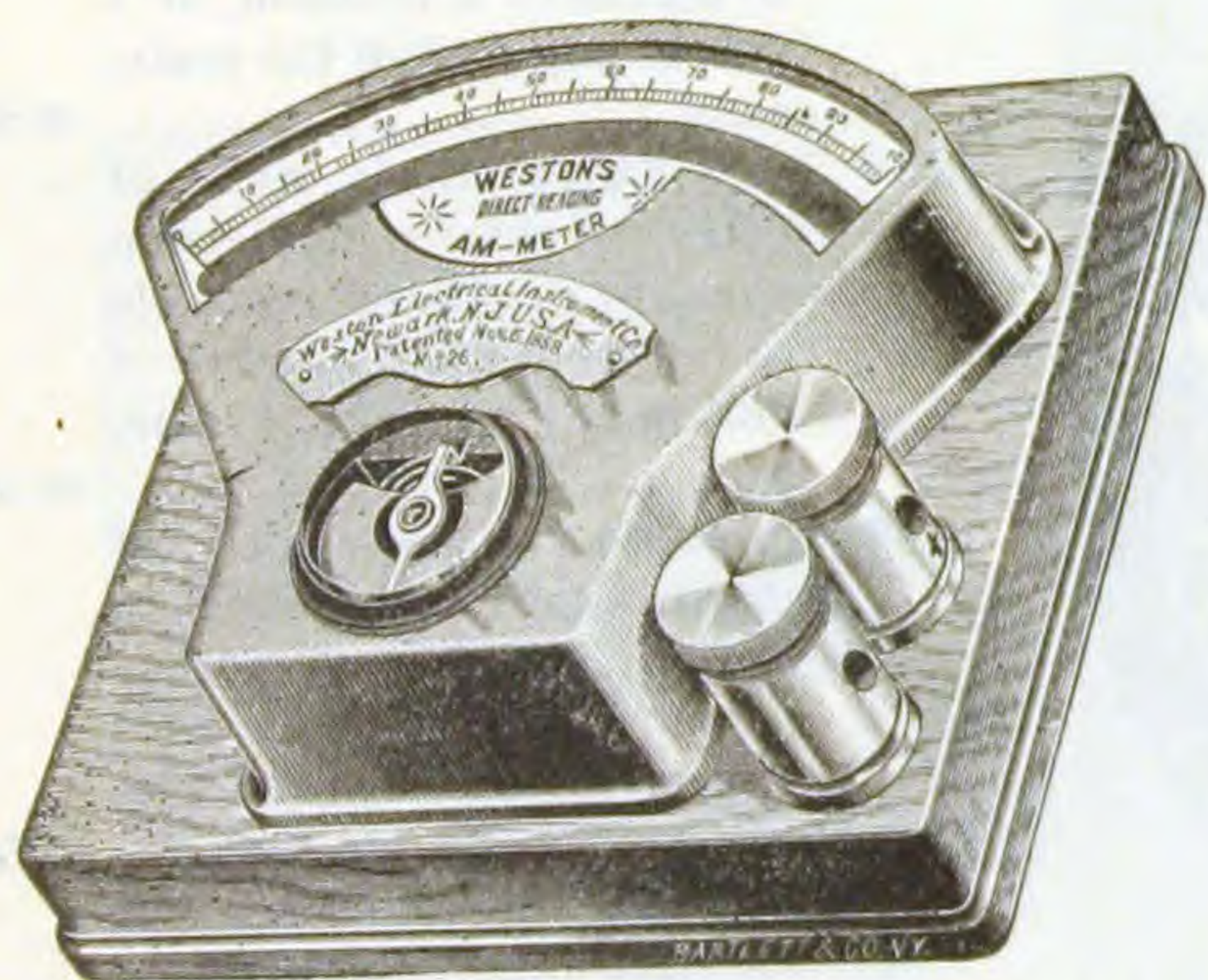
Cat. No.

Price.

12488	No. 0. 150 mil ammeter scale; single scale divisions 1 mil ampere, readable to $\frac{1}{10}$ mil ampere, each.....	\$50.00
12489	No. 1. 300 mil ampere scale; single scale divisions 2 mil amperes, readable to $\frac{1}{8}$ mil ampere, each.....	50.00
12490	No. 2. 600 mil ampere scale; single scale divisions 5 mil amperes, readable to $\frac{1}{2}$ mil ampere, each.....	50.00
12491	No. 3. 1,000 mil ampere scale; single scale divisions 10 mil amperes, readable to mil amperes, each.....	50.00
12492	No. 4. 1,500 mil ampere scale; single scale divisions 10 mil amperes, readable to mil amperes, each.....	55.00

## AMMETERS.

12493	No. 1. 5 ampere scale; single scale divisions $\frac{1}{20}$ of an ampere, readable to $\frac{1}{200}$ of an ampere, each.....	65.00
12494	No. 2. 15 ampere scale; single scale divisions $\frac{1}{10}$ of an ampere, readable to $\frac{1}{100}$ of an ampere, each.....	65.00
12495	No. 3. 25 ampere scale; single scale divisions $\frac{1}{4}$ of an ampere, readable to $\frac{1}{40}$ of an ampere, each.....	65.00
12496	No. 4. 50 ampere scale; single scale divisions $\frac{1}{2}$ of an ampere, readable to $\frac{1}{20}$ of an ampere, each.....	65.00
12497	No. 5. 100 ampere scale; single scale divisions 1 ampere, readable to $\frac{1}{10}$ of an ampere, each.....	70.00
12498	No. 6. 150 ampere scale; single scale divisions 1 ampere, readable to $\frac{1}{10}$ of an ampere, each.....	75.00
12499	No. 7. 200 ampere scale, each,	80.00
12500	" 8. 250      "      "      "	80.00
12501	" 9. 300      "      "      "	80.00
12502	" 10. 400      "      "      "	90.00
12503	" 11. 500      "      "      "	90.00



Cat. No. 12497.



## Weston Railway, Isolated Plant and Feeder Voltmeters.

For Direct Current Circuits Only.

### ROUND PATTERN.

Price.

Cat. No.

- |       |   |         |
|-------|---|---------|
| 12504 | No. 1, 3 Volt Scale. Scale of 150 divisions, each division equal to .02 of a volt and readable to tenths of a division, or .002 volts in any part of the scale, each..... | \$25.00 |
| 12506 | No. 2, 6 Volt Scale. Scale of 120 divisions, each division equal to .05 of a volt and readable to tenths of a division, or .005 volts in any part of the scale, each..... | 25.00   |
| 12507 | No. 3, 15 Volt Scale. Scale of 150 divisions, each division equal to .1 of a volt and readable to tenths of a division, or .01 volt in any part of the scale, each.....   | 25.00   |
| 12508 | No. 4, 25 Volt Scale. Scale of 125 divisions, each division equal to .2 of a volt and readable to tenths of a division, or .02 volt in any part of the scale, each.....   | 26.00   |
| 12509 | No. 5, 50 Volt Scale. Scale of 100 divisions, each division equal to .5 of a volt and readable to tenths of a division, or .05 volt in any part of the scale, each.....   | 26.50   |
| 12510 | No. 6, 75 Volt Scale. Scale of 150 divisions, each division equal to .5 of a volt and readable to tenths of a division, or .05 volt in any part of the scale, each.....   | 27.25   |
| 12511 | No. 7, 125 Volt Scale. Scale of 125 divisions, each division equal to 1 volt and readable to tenths of a division, or .1 volt in any part of the scale, each.....         | 28.25   |
| 12512 | No. 8, 150 Volt Scale. Scale of 150 divisions, each division equal to 1 volt and readable to tenths of a division, or .1 volt in any part of the scale, each.....         | 29.50   |
| 12513 | No. 9, 300 Volt Scale. Scale of 150 divisions, each division equal to 2 volts and readable to tenths of a division, or .2 volt in any part of the scale, each.....        | 32.50   |
| 12514 | No. 10, 600 Volt Scale. Scale of 120 divisions, each division equal to 5 volts and readable to tenths of a division, or .5 volt in any part of the scale, each.....       | 35.00   |
| 12515 | No. 11, 750 Volt Scale. Scale of 150 divisions, each division equal to 5 volts and readable to tenths of a division, or .5 volt in any part of the scale, each.....       | 37.00   |



Cat. No. 12512.



## Weston Railway, Isolated Plant and Feeder Ammeters.

For Direct Current Circuits Only.

### ROUND PATTERN.

Cat. No.		Price.
12516	No. 1, 1 Ampere Scale. Instrument combined with shunt. Scale of 100 divisions, each division equal to .01 of an ampere, readable to tenths of a division, or .001 ampere in any part of the scale, each.....	\$25.00
12517	No. 2, 5 Ampere Scale. Instrument combined with shunt. Scale of 100 divisions, each division equal to .05 of an ampere, readable to tenths of a division, or .005 ampere in any part of the scale, each.....	25.00
12518	No. 3, 10 Ampere Scale. Instrument combined with shunt. Scale of 100 divisions, each division equal to .1 of an ampere, readable to tenths of a division, or .01 ampere in any part of the scale, each.....	25.00
12519	No. 4, 15 Ampere Scale. Instrument combined with shunt. Scale of 150 divisions, each division equal to .1 of an ampere, readable to tenths of a division, or .01 ampere in any part of the scale, each.....	25.00
12520	No. 5, 25 Ampere Scale. Instrument combined with shunt. Scale of 125 divisions, each division equal to .5 of an ampere, readable to tenths of a division, or .05 ampere in any part of the scale, each.....	25.00
12521	No. 6, 50 Ampere Scale. Instrument combined with shunt. Scale of 100 divisions, each division equal to .5 of an ampere, readable to tenths of a division, or .05 ampere in any part of the scale, each.....	25.50
12522	No. 7, 75 Ampere Scale. Instrument combined with shunt. Scale of 150 divisions, each division equal to .5 of an ampere, readable to tenths of a division, or .05 ampere in any part of the scale, each.....	26.00
12523	No. 8, 100 Ampere Scale. Instrument with separate shunt. Scale of 100 divisions, each division equal to 1 ampere, readable to tenths of a division, or .1 ampere in any part of the scale, each.....	26.50
12524	No. 9, 150 Ampere Scale. Instrument with separate shunt. Scale of 150 divisions, each division equal to 1 ampere, readable to tenths of a division, or .1 ampere in any part of the scale, each.....	27.00



Cat. No. 12523.



**THOMSON RECORDING WATT-METERS.**

Lights Rated on a Basis of 50 Watts Per Lamp.

**50 VOLTS.**

Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.
12525	10	10	\$25.00	12530	100	100	\$70.00	12534	1200	1200	\$250.00
12526	15	15	30.00	12531	150	150	80.00	12535	2500	2500	330.00
12527	25	25	36.00	12532	300	300	110.00	12536	5000	5000	370.00
12528	50	50	45.00	12533	600	600	150.00	12537	8000	8000	400.00
12529	75	75	55.00								

30 Volt Meters for use in connection with Constant Potential Arc Lighting circuits will be furnished at price of same ampere capacity of 50 Volt Meters.

**100 TO 110 VOLTS.**

Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.
12538	10	5	\$27.50	12544	200	100	\$80.00	12549	1200	600	\$190.00
12539	20	10	30.00	12545	300	150	100.00	12550	2400	1200	320.00
12540	30	15	33.00	12546	400	200	110.00	12551	5000	2500	380.00
12541	50	25	45.00	12547	600	300	130.00	12552	10000	5000	425.00
12542	100	50	50.00	12548	900	450	160.00	12553	16000	8000	460.00
12543	150	75	70.00								

**PRIMARY CIRCUITS—1000 TO 2000 VOLTS.**

(Prices include Transformer.)

Cat. No.	Amperes.	Price.	Cat. No.	Amperes.	Price.	Cat. No.	Amperes.	Price.
12554	10	\$80.00	12557	60	\$125.00	12559	300	\$210.00
12555	20	90.00	12558	120	160.00	12560	600	300.00
12556	30	100.00						

**THREE-WIRE—220 VOLTS.**

Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.
12561	33	7½	\$35.00	12564	220	50	\$75.00	12566	440	100	\$100.00
12562	66	15	50.00	12565	300	75	85.00	12567	666	150	125.00
12563	110	25	60.00								

**METERS FOR MOTOR SERVICE—220 VOLTS.**

Cat. No.	H. P.	Amps.	Price.	Cat. No.	H. P.	Amps.	Price.	Cat. No.	H. P.	Amps.	Price.
12568	1¼	5	\$36.50	12573	25	100	\$100.00	12578	160	600	\$220.00
12569	3½	15	50.00	12574	40	150	120.00	12579	320	1200	300.00
12570	7	25	60.00	12575	50	200	135.00	12580	700	2500	425.00
12571	15	50	70.00	12576	80	300	150.00	12581	1400	5000	475.00
12572	20	75	85.00	12577	125	450	190.00	12582	2200	8000	520.00

**500 VOLTS.**

Cat. No.	H. P.	Amps.	Price.	Cat. No.	H. P.	Amps.	Price.	Cat. No.	H. P.	Amps.	Price.
12583	1½	3	\$40.00	12589	60	100	\$110.00	12594	400	600	\$275.00
12584	5	10	55.00	12590	100	150	125.00	12595	800	1200	375.00
12585	7½	15	60.00	12591	120	200	150.00	12596	1600	2500	450.00
12586	15	25	65.00	12592	200	300	175.00	12597	3200	5000	500.00
12587	30	50	85.00	12593	300	450	225.00	12598	5400	8000	550.00
12588	50	75	100.00								

**PORTABLE METERS FOR STREET CAR TESTING, ETC.—500 VOLTS.**

Cat. No.	H. P.	Amps.	Price.	Cat. No.	H. P.	Amps.	Price.
12599	1½	3	\$55.00	12601	15	25	\$85.00
12600	7½	15	70.00	12602	30	50	100.00

**ARC CIRCUIT METERS.**

Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.
12603	4	6½	\$65.00	12605	8	6½	\$75.00
12604	4	10	65.00	12605½	8	10	75.00

**ARC CIRCUIT STATION METERS.**

Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.	Cat. No.	Lights.	Amps.	Price.
12606	35	6½	\$110.00	12609	50	10	\$125.00	12612	80	6½	\$150.00
12607	35	10	110.00	12610	65	6½	135.00	12613	80	10	150.00
12608	50	6½	125.00	12611	65	10	135.00				

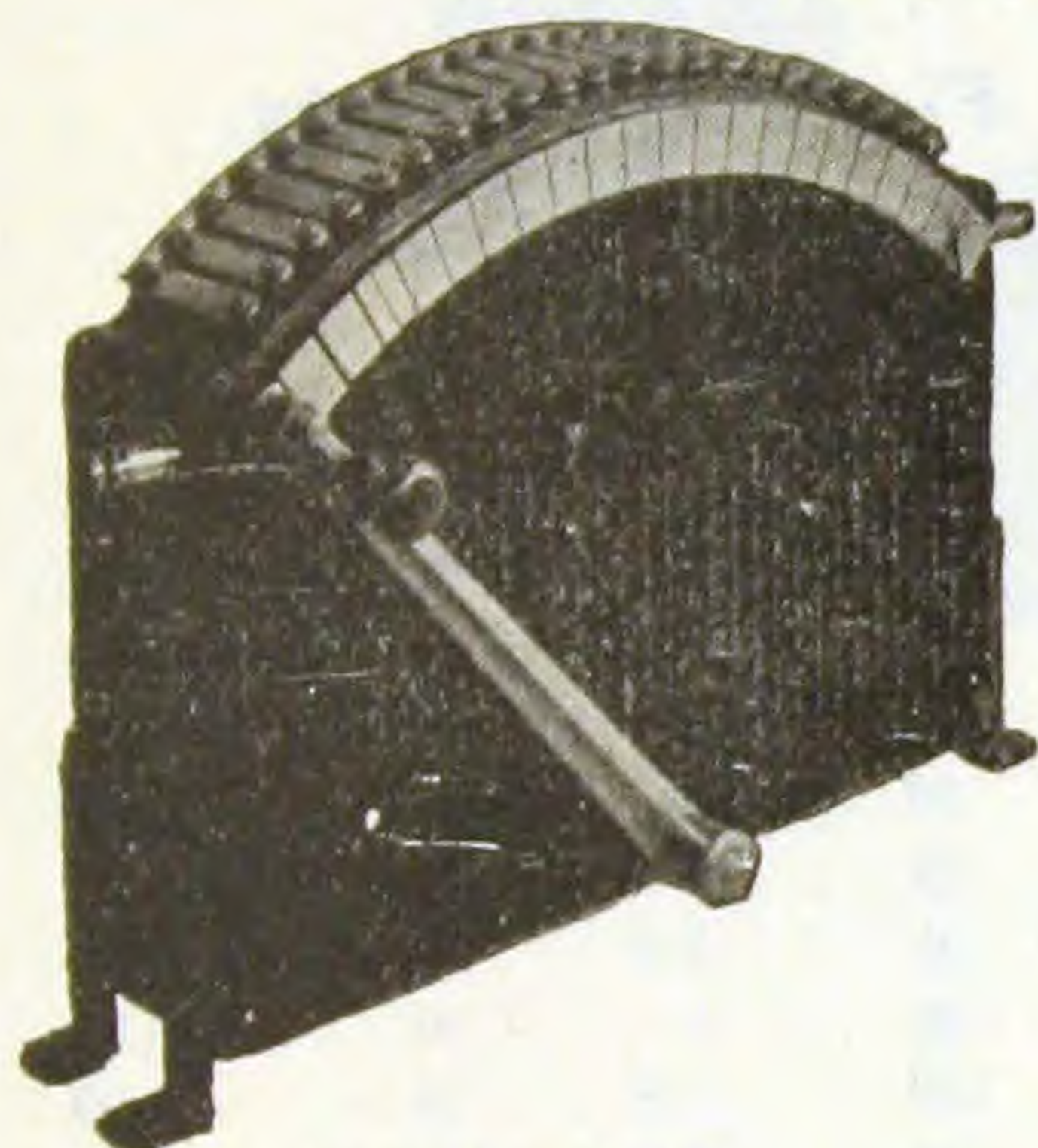
Cat. No.	Price.	Cat. No.	Price.
12614 Meter Sealing Tool, large size....	\$9.50	12616 Meter Price Chart.....	\$1.85
12615 Meter Sealing Tool, pocket size..	2.75	12617 Meter Record Book.....	1.35



## STANDARD RHEOSTATS.

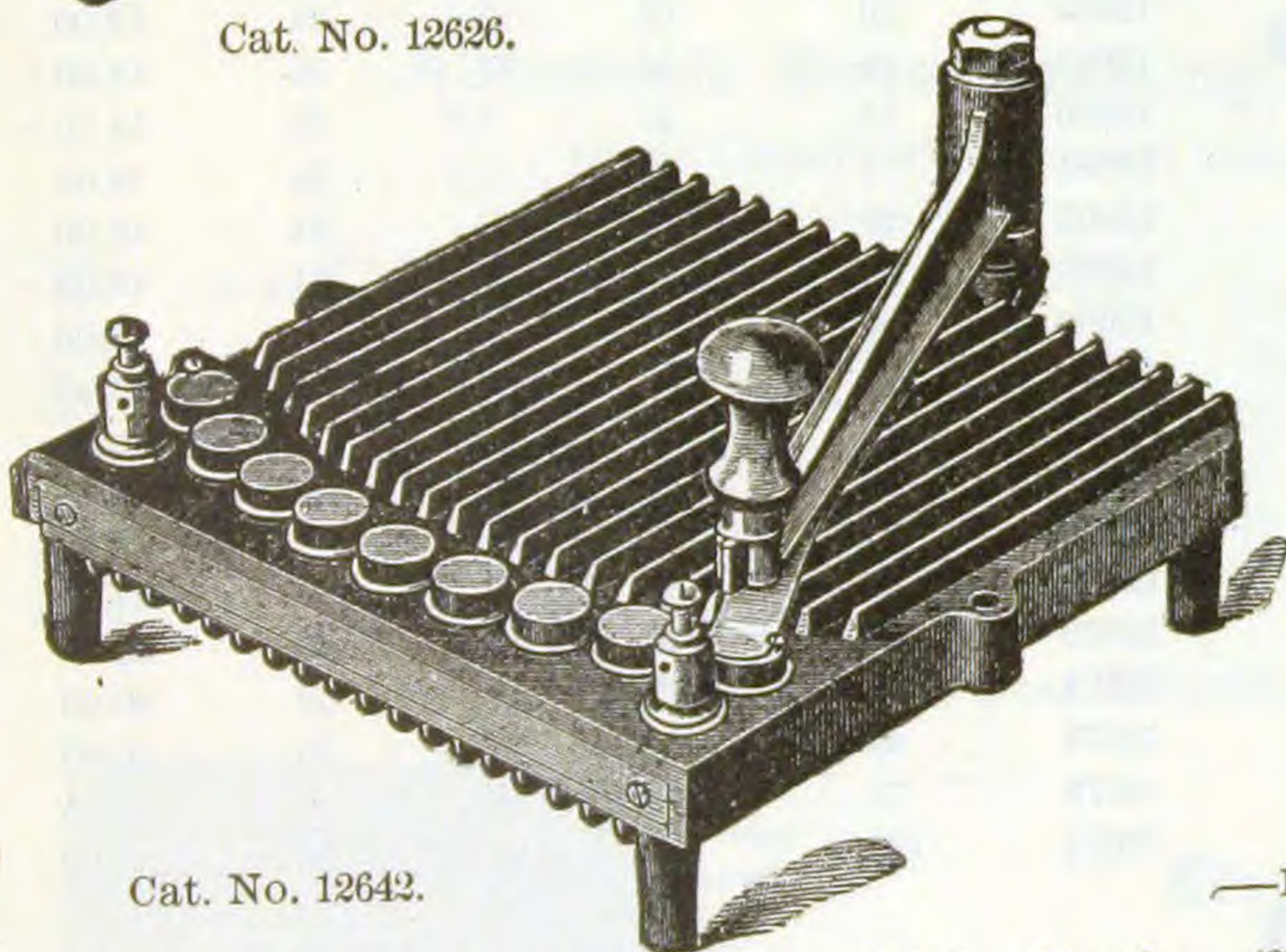
### Motor Speed Regulating Rheostats.

For regulating the speed of motors under full load. To be used in circuit continuously on any step. Heavy special "double-contact" steps on large sizes.



Cat. No. 12626.

Cat. No.	H. P.	Length In.	Width In.	Depth In.	No. of Steps.	Maximum Amperes—			Price.
						125 Volts.	250 Volts.	500 Volts.	
12618	1/8	5 1/2	5 1/2	2	6	1.5	.....	.....	\$8.00
12619	1/4	8 1/2	8	2	8	3	1.5	1	10.00
12620	1/2	11	10 1/2	2 1/2	10	6	3	1.5	13.00
12621	1	11	10 1/2	2 1/2	10	10	6	3	18.00
12622	2	13	12	2 1/2	12	18	10	5	23.00
12623	3	13	12	2 1/2	12	25	14	7	27.00
12624	5	13	12	5	12	40	20	10	45.00
12625	7 1/2	13	12	7 1/2	12	60	30	15	60.00
12626	10	20	15	6	20	80	40	20	80.00
12627	12	20	15	6	20	96	48	24	86.00
12628	15	20	15	6	20	120	60	30	95.00
12629	18	20	15	9	20	144	72	36	110.00
12630	20	20	15	9	20	160	80	40	120.00
12631	25	20	15	12	20	200	100	50	145.00
12632	30	20	15	15	20	240	120	60	173.00
12633	40	20	15	18	20	320	160	80	227.00
12634	50	20	15	21	20	400	200	100	269.00



Cat. No. 12642.

### Standard Motor Starting Rheostats.

125, 250 and 500 Volts.

Cat. No.	H. P.	Length Inches.	Width Inches.	Depth Inches.	No. of Steps.	Maximum Amperes— for 20 Seconds.			Price.
						125 Volts.	250 Volts.	500 Volts.	
12635	1/4	5 1/2	5 1/2	2	6	2	1	1/2	\$7.00
12636	1/2	5 1/2	5 1/2	2	6	4	2	1	7.50
12637	1	8 1/2	8	2	8	8	4	2	8.00
12638	2	8 1/2	8	2	8	16	8	4	8.50
12639	3	8 1/2	8	2	8	24	12	6	9.00
12640	5	11	10 1/2	2 1/2	10	40	20	10	15.00
12641	7 1/2	11	10 1/2	2 1/2	10	60	30	15	17.50
12642	10	13	12	2 1/2	12	80	40	20	24.00
12643	12	13	12	2 1/2	12	96	48	24	26.00
12644	15	13	12	2 1/2	12	120	60	30	28.00
12645	18	13	12	5	12	144	72	36	30.00
12646	20	13	12	5	12	160	80	40	33.00
12647	25	13	12	5	12	200	100	50	36.00
12648	30	13	12	7 1/2	12	240	120	60	44.00
12649	40	13	12	10	12	320	160	80	55.00
12650	50	13	12	12 1/2	12	400	200	100	75.00



## RHEOSTATS.

### Standard Field Rheostats.

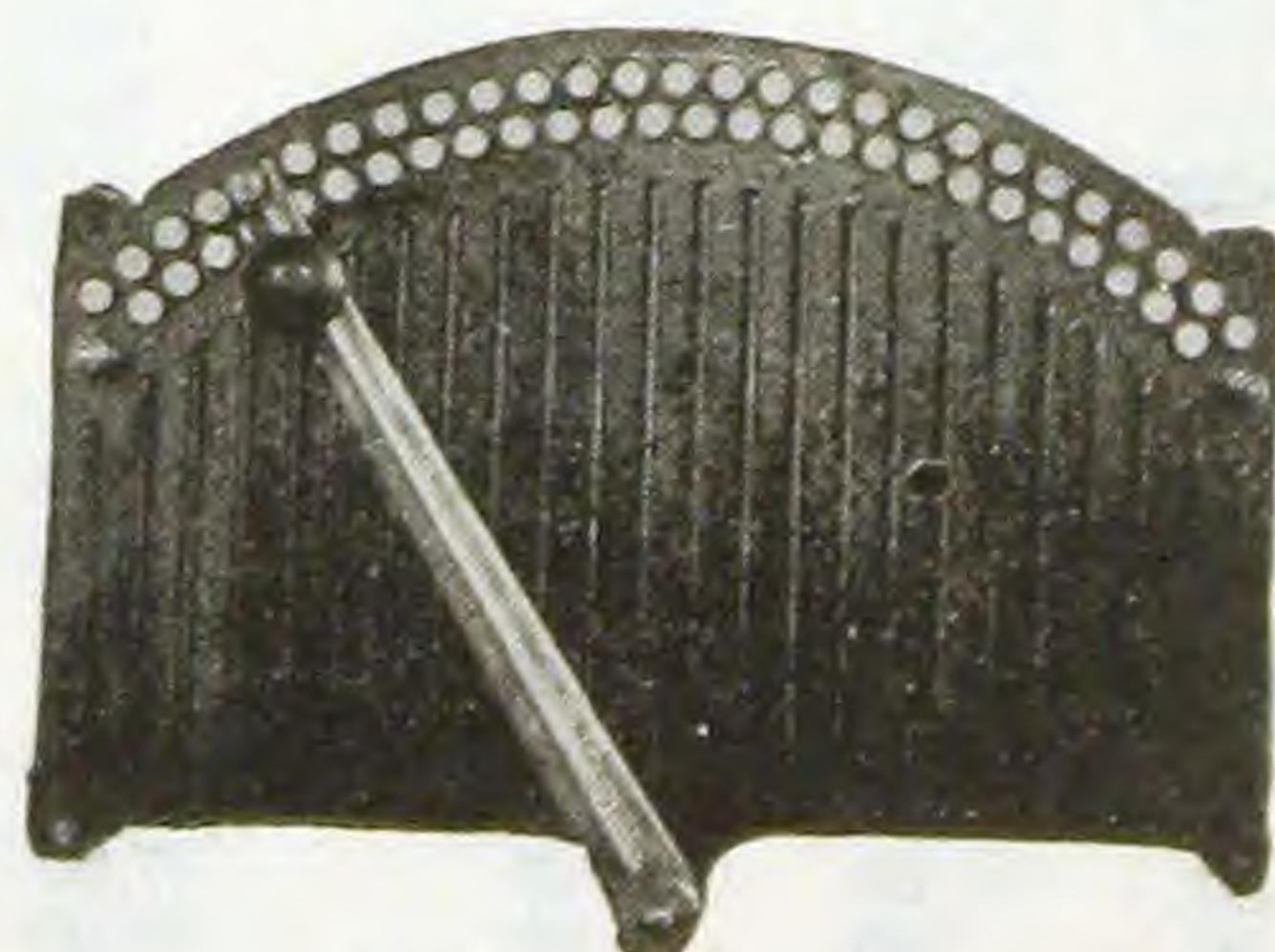
For Mounting on Face of Switchboard.



Cat. No. 12651.

125 VOLTS.

Cat. No.	Approx. Size Dynamo, K.W.	Ohms.	Maximum Amperes.	No. of Steps.	Price.
12651	7.5	120	1.8	20	\$15.00
12652	10	80	2.4	20	15.00
12653	12	50	3	20	15.00
12654	15	45	3.6	20	15.00
12655	18	40	4.3	20	15.00
12656	20	35	5	20	15.00
12657	7½	120	1.8	24	18.00
12658	10	80	2.4	24	18.00
12659	12	50	3	24	18.00
12660	15	45	3.6	24	18.00
12661	18	40	4.3	24	18.00
12662	20	35	5	24	18.00
12663	25	30	6	24	18.00
12664	30	25	7	24	18.00
12665	15	45	3.6	50	24.00
12666	18	40	4.3	50	24.00
12667	20	35	5	50	24.00
12668	25	30	6	50	24.00
12669	30	25	7	50	24.00
12670	40	20	8.4	50	32.00
12671	50	17	12	50	40.00
12672	60	14	14	50	40.00
12673	75	12	18	50	40.00
12674	100	8	24	50	40.00

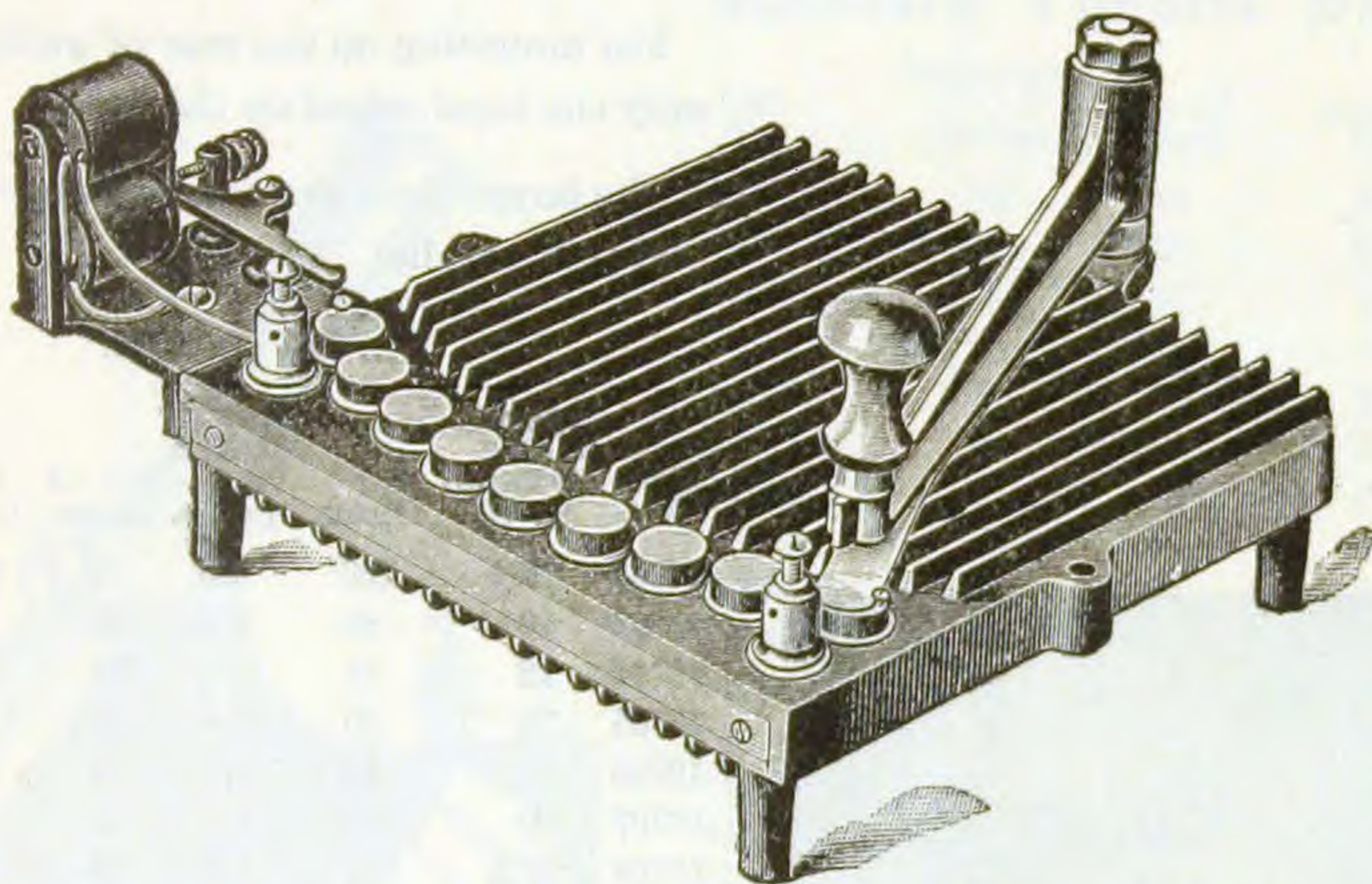


Cat. No. 12675.

500 VOLTS.

12675	20	450	1.3	24	22.00
12676	30	400	1.7	24	22.00
12677	40	300	2	24	22.00
12678	20	450	1.3	50	28.00
12679	30	400	1.7	50	28.00
12680	40	300	2	50	40.00
12681	50	250	3	50	40.00
12682	60	200	4	50	48.00
12683	75	150	5	50	48.00
12684	100	125	6	50	48.00
12685	125	100	7.5	50	56.00
12686	150	75	9	50	56.00



**STANDARD RHEOSTATS.**

Cat. No. 12689.

**Automatic Motor Starting Rheostats.**

Opens Circuit when Current Supply fails.

Cat. No.	H. P.	No. of Steps.	Price			Cat. No.	H. P.	No. of Steps.	Price		
			125 Volts.	250 Volts.	500 Volts.				125 Volts.	250 Volts.	500 Volts.
12687	$\frac{1}{4}$	6	\$15.00	\$16.00	\$17.00	12693	$7\frac{1}{2}$	10	\$24.00	\$25.00	\$26.00
12688	$\frac{1}{2}$	6	15.50	16.50	17.50	12694	10	12	33.00	34.50	36.00
12689	1	8	16.00	17.00	18.00	12695	15	12	36.00	37.50	39.00
12690	2	8	16.50	17.50	18.50	12696	20	12	43.00	44.50	46.00
12691	3	8	17.00	18.00	19.00	12697	25	12	46.00	47.50	49.00
12692	5	10	22.00	23.00	24.00						

Prices on larger sizes on application.

**Electric Heaters.**

For either Alternating or Continuous Current.

52, 125, 250 or 500 volts. Size, 12 x 12 inches. Used for heating offices, bedrooms, bathrooms, laboratories, sick-rooms, etc. No smoke, no ashes, no smell, no danger of fire. Very valuable as auxiliary to other heating apparatus.



Cat. No. 12698.

Cat. No.	No. of Plates.	Size, Inches.	Price.
12698	1	12 x 12 x 2	\$12.00
12699	2	12 x 12 x 5	23.00
12700	3	12 x 12 x $7\frac{1}{2}$	33.00
12701	4	12 x 12 x 10	43.00



### Standard Field Rheostats.

For mounting on the rear of switchboard with only the hand-wheel on the face.

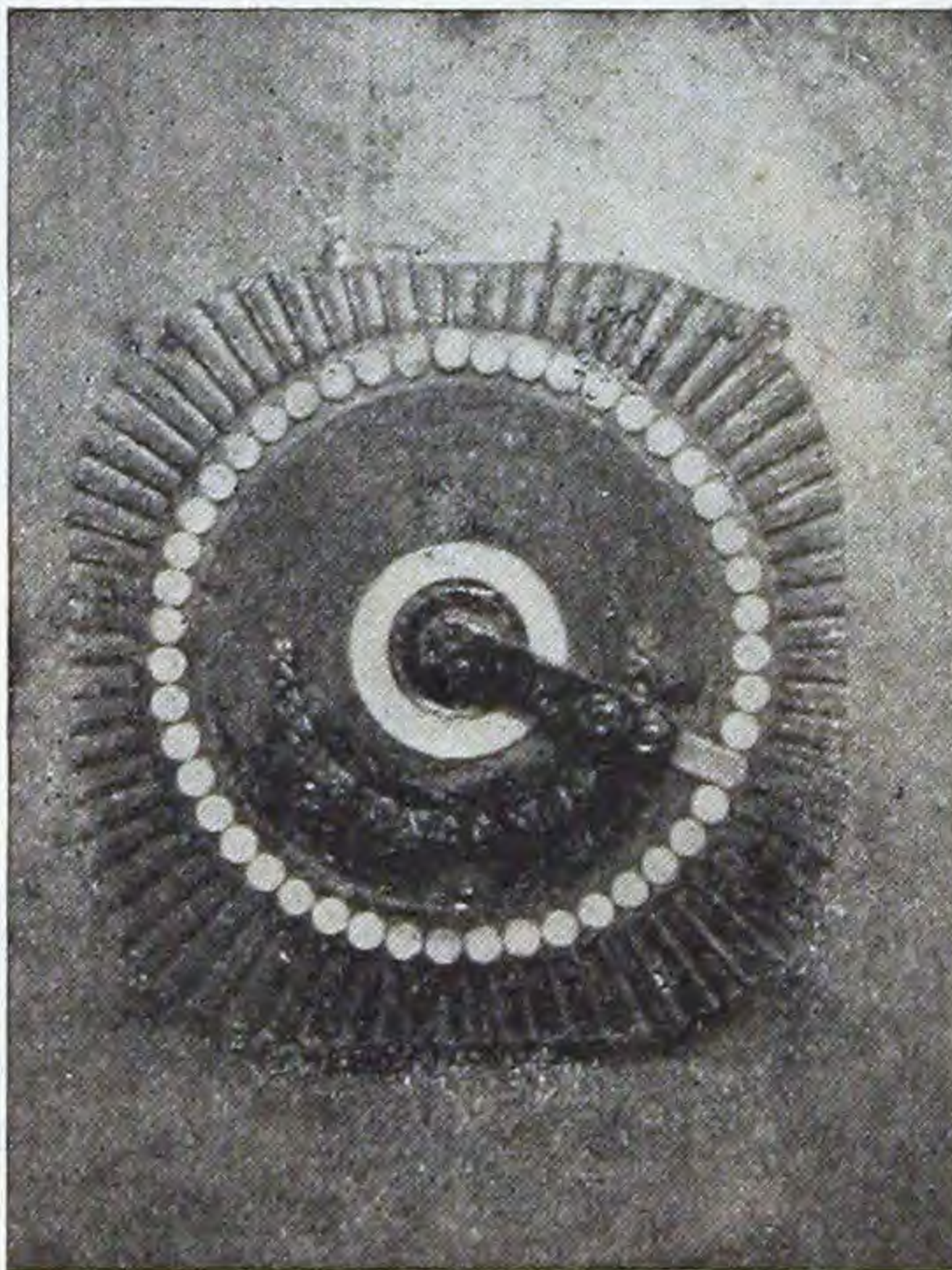
The larger sizes are composed of two or more plates in parallel.

#### 125 VOLTS.

Cat. No.	Approx. Size Dynamo K. W.	Ohms.	Maxi- mum Am- peres.	No. of Steps.	Size, Inches.	Price.
12702	7.5	120	1.8	32	10x10	\$30.00
12703	10	80	2.4	32	"	30.00
12704	12	50	3	32	"	30.00
12705	15	45	3.6	32	"	30.00
12706	18	40	4.3	32	"	30.00
12707	20	35	5	32	"	30.00
12708	7.5	120	1.8	48	13½x13½	36.00
12709	10	80	2.4	48	"	36.00
12710	12	50	3	48	"	36.00
12711	15	45	3.6	48	"	36.00
12712	18	40	4.3	48	"	36.00
12713	20	35	5	48	"	36.00
12714	25	30	6	48	"	36.00
12715	30	25	7	48	"	36.00
12716	20	35	5	66	17x17	44.00
12717	25	30	6	66	"	44.00
12718	30	25	7	66	"	44.00
12719	40	20	8.4	66	"	44.00
12720	50	17	12	66	"	52.00
12721	60	14	14	66	"	52.00
12722	75	12	18	66	"	52.00
12723	100	8	24	66	"	52.00
12724	125	6.5	28	66	"	60.00
12725	150	4	32	66	"	60.00
12726	200	3	44	66	"	66.00

#### 500 VOLTS.

12727	50	250	3	66	17x17	58.00
12728	60	200	4	66	"	58.00
12729	75	150	4.5	66	"	58.00
12730	100	125	5.5	66	"	58.00
12731	125	100	7	66	"	66.00
12732	150	75	8	66	"	66.00
12733	200	60	10	66	"	72.00
12734	250	50	12	66	"	78.00
12735	300	40	13.5	66	"	80.00
12736	400	30	17	66	"	90.00
12737	500	25	21	66	"	100.00



Cat. No. 12702.



## Standard Theatre Dimmers.

Cat. No.	Capacity, 16 C. P. Lamps.	No. of Steps.	Depth, In.	Price.
12738	10	21	3	\$24.00
12739	12	21	3	25.00
12740	15	21	3	26.00
12741	20	21	3	27.00
12742	25	21	3	29.00
12743	30	21	3	31.00
12744	40	21	3	33.00
12745	50	21	3	35.00
12746	60	21	3	37.00
12747	70	21	6	44.00
12748	80	21	6	46.00
12749	90	21	6	48.00
12750	100	21	6	50.00
12751	125	21	9	56.00
12752	150	21	12	66.00
12753	175	21	12	71.00
12754	200	21	15	79.00
12755	225	21	15	84.00
12756	250	21	18	89.00
12757	275	21	18	94.00
12758	300	21	21	102.00
12759	400	21	27	125.00
12760	500	21	33	150.00

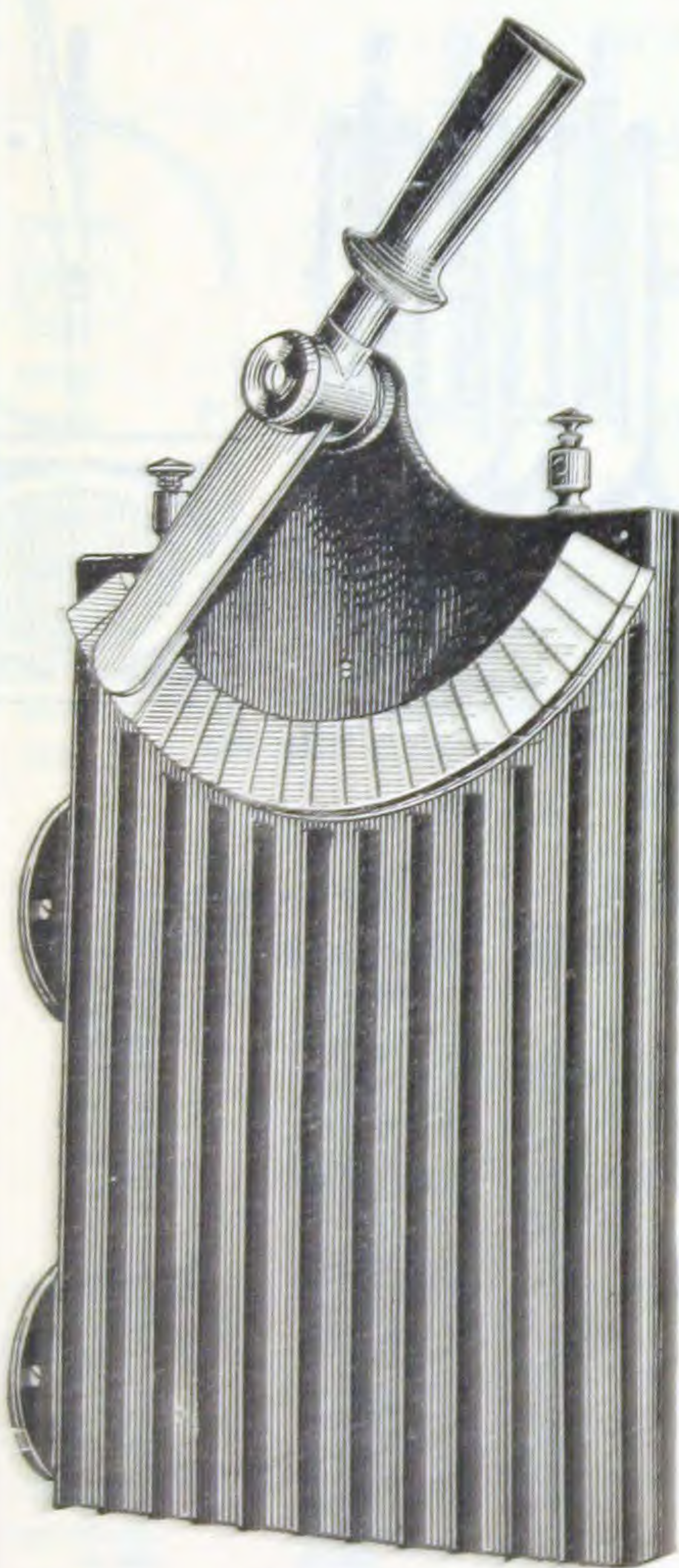
In ordering state voltage of lamps. Special sizes and combinations made to order.

## Special Rheostats.

For regulating speed through wide range of variation, organ work, ventilators, pumping, etc.

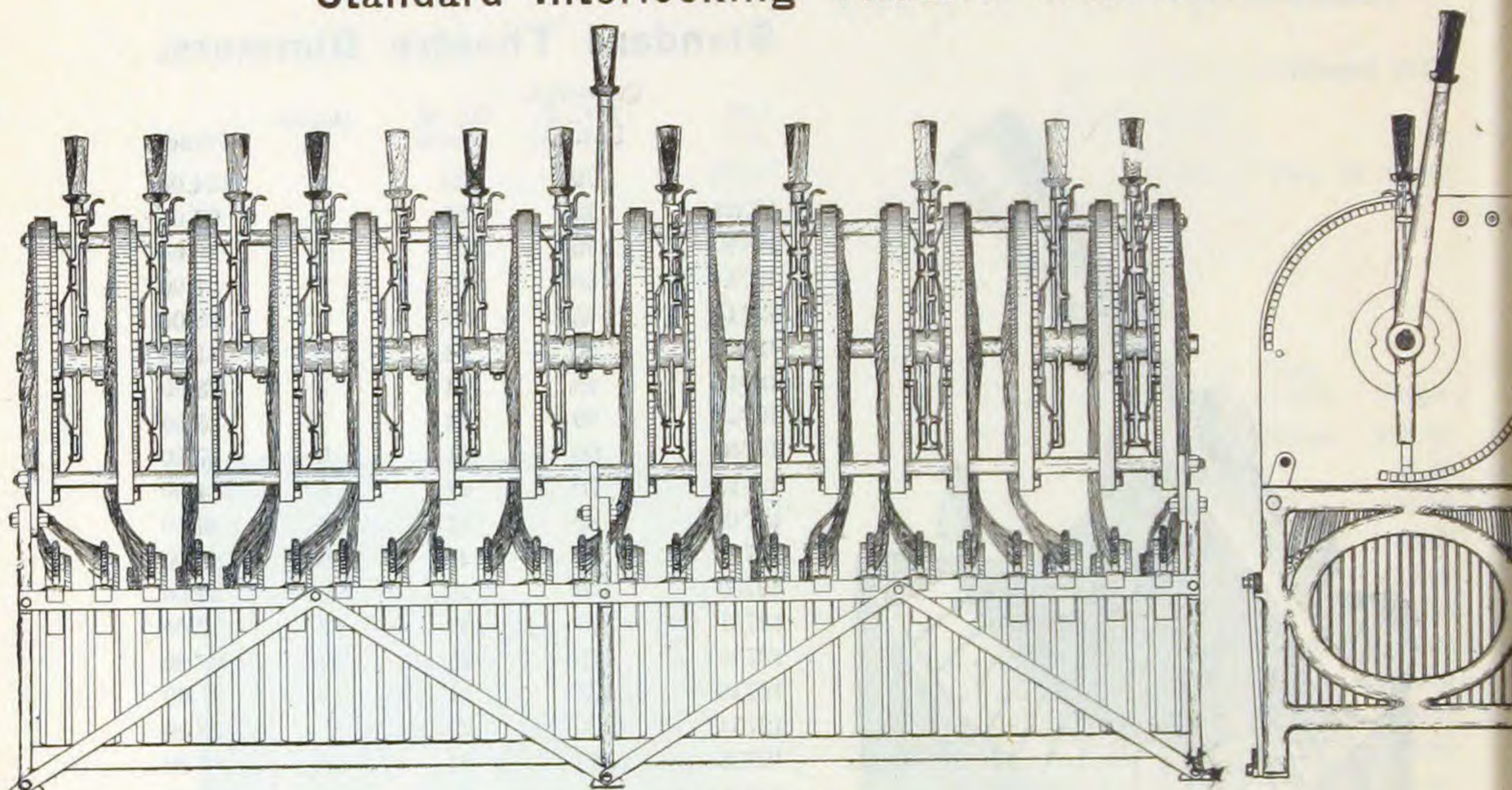
Cat. No.	H. P.	Dimensions Over All.				Price.	
		Length In.	Width In.	Depth In.	No. of Steps.	110 Volts.	220 Volts.
12761	$\frac{1}{4}$	13	12	$2\frac{1}{2}$	24	\$26.00	\$28.00
12762	$\frac{1}{2}$	13	12	$2\frac{1}{2}$	24	30.00	32.00
12763	1	13	12	$2\frac{1}{2}$	24	34.00	36.00
12764	2	13	12	$2\frac{1}{2}$	24	38.00	40.00
12765	3	13	12	5	24	42.00	44.00

Cat. No. 12738.





## Standard Interlocking Theatre Dimmers.



Cat. No. 12766.

56 STEPS.

Cat. No.	Capacity 16 C. P. Lamps.	Dimensions.			Price.	
		Depth, Inches.	Width, Inches.	Height, Inches.	Interlocking.	Without Inter- locking Device.
12766	10 to 25	18	6	37	\$100.00	\$70.00
12767	12 " 30	18	6	37	100.00	70.00
12768	15 " 35	18	6	37	105.00	73.00
12769	18 " 40	18	6	37	110.00	77.00
12770	20 " 50	18	6	37	115.00	80.00
12771	25 " 60	18	6	37	125.00	90.00
12772	30 " 75	18	6	37	135.00	100.00
12773	40 " 100	18	6	37	148.00	113.00
12774	50 " 125	18	8½	37	154.00	119.00
12775	70 " 150	18	8½	37	163.00	128.00
12776	80 " 175	18	11	37	170.00	135.00
12777	90 " 200	18	11	37	180.00	145.00
12778	125 " 250	18	13½	37	195.00	160.00
12779	150 " 300	18	13½	37	208.00	173.00
12780	200 " 350	18	16	37	238.00	203.00
12781	250 " 400	18	18½	37	254.00	219.00
12782	300 " 500	18	23½	37	275.00	240.00
12783	400 " 600	18	28½	37	310.00	275.00
12784	500 " 700	18	33½	37	350.00	315.00
12785	600 " 800	18	38½	37	400.00	365.00
12786	700 " 900	18	43½	37	460.00	425.00
12787	800 " 1000	18	48½	37	520.00	485.00

We manufacture a great variety of Theatre Dimmers in any capacity from 1 light to 5,000 lights. Special sizes and combinations made to order.

## THREE-WIRE DIMMERS.

The Dimmers in these lists are all for Two-wire System. For prices on Three-wire Dimmers, add 50 per cent. to prices on Two-wire Dimmers. For instance, the list price on Catalogue, No. 12766, Two-wire 25-light Dimmer, is \$70.00; the list price on Three-wire 25-light Dimmer, same style, would be \$105.00.



## Special Dimmers.

For limited space.

Can be mounted in a Vertical or Horizontal Position.

Cat. No.	Capacity 16 C. P. Lamps.	No. of Steps.	Depth, inches.	Price.
12788	40	20	3	\$33.00
12789	50	20	3	35.00
12790	60	20	3	37.00
12791	70	20	3	39.00
12792	80	20	3	41.00
12793	90	20	3	43.00
12794	100	20	5	48.00
12795	125	20	5	50.00
12796	150	20	8	54.00
12797	200	20	8	67.00
12798	250	20	11	76.00

## Small Dimmers.

For Theatres, Lodge Rooms, Clubs, Halls, Residences, etc.

Cat. No.	Capacity 16 C. P. Lamps.	No. of Steps.	Depth, inches.	Price.
12799	1	6	1½	\$7.00
12800	2 or 3	6	1½	8.00
12801	4 or 5	6	1½	9.00
12802	6	8	2	11.00
12803	8	8	2	12.00
12804	10	10	2½	16.00
12805	12	10	2½	17.00
12806	15	10	2½	19.00
12807	20	12	2½	22.00
12808	25	12	2½	24.00
12809	30	12	2½	27.00

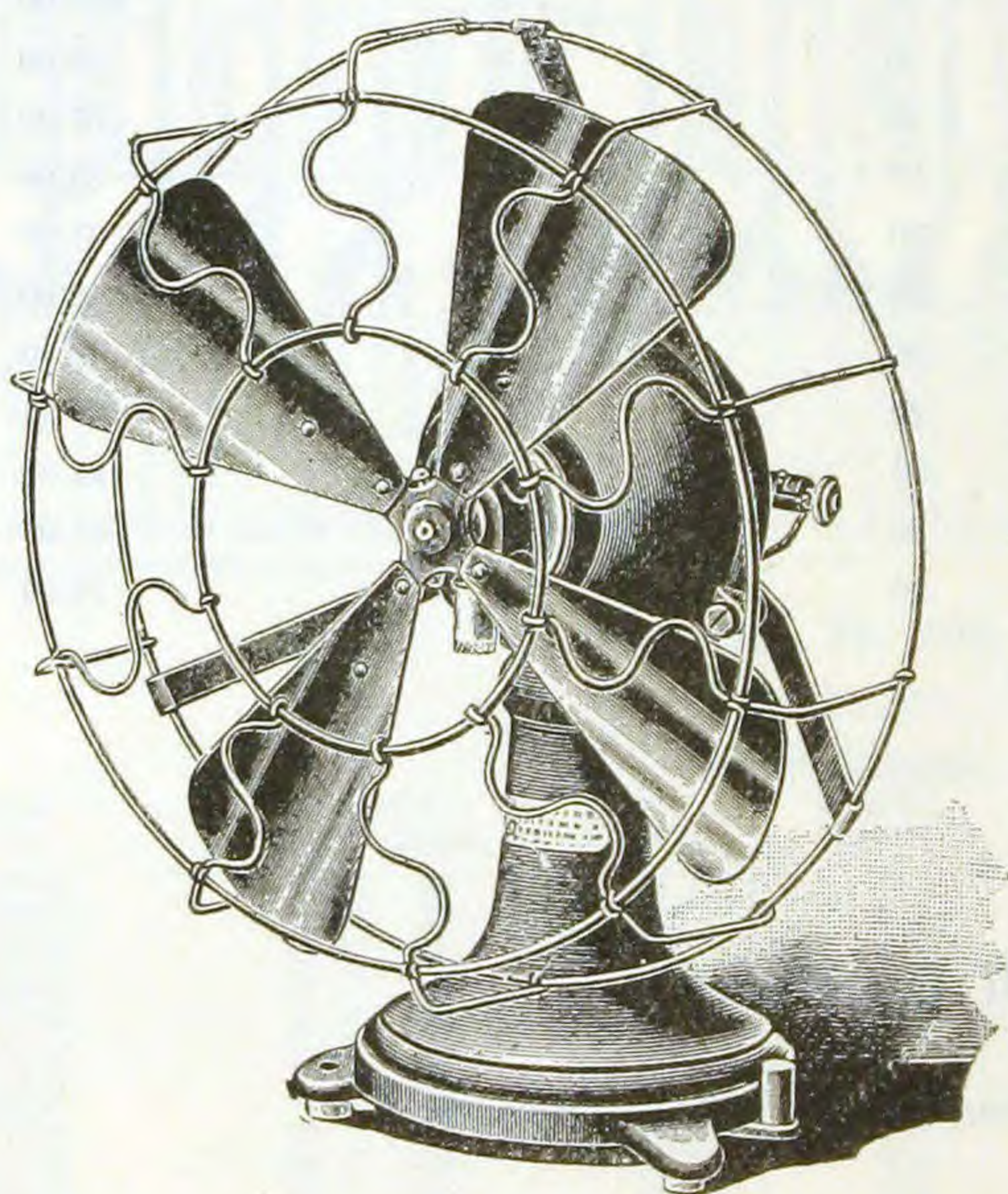


## DIRECT CURRENT FAN MOTOR.

### Desk and Office Fan Outfit.

Noiseless.

#### SPECIFICATION.

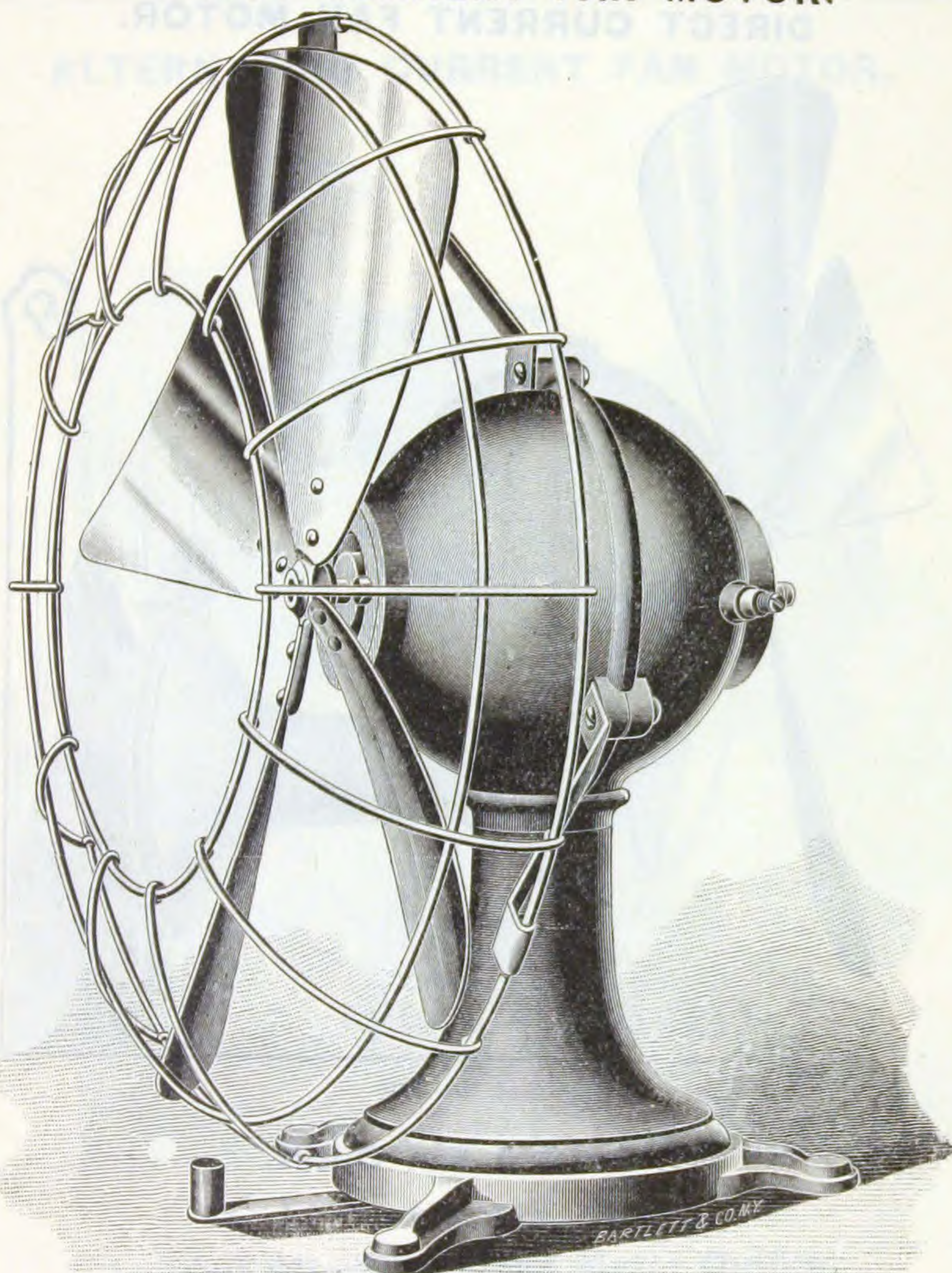


Cat. No. 12810.

Cat. No.	Price.
12810	One-twelfth H. P.—Lundell Fan Motor, with regulating switch, giving three speeds, viz.: 1,800, 1,400 and 1,100 revolutions per minute at 110 volts, for constant potential, incandescent, circuits up to 120 volts, self-oiling and self-aligning bearings, japan finish; complete with 12-inch black japanned fan and guard..\$34.00
12811	With polished brass fan and guard, and all other outside brass fittings polished ..... 35.00
12812	With nickel-plated fan and guard, and all other outside brass fittings nickel-plated..... 36.00



**DIRECT CURRENT FAN MOTOR.**



Cat. No. 12813.

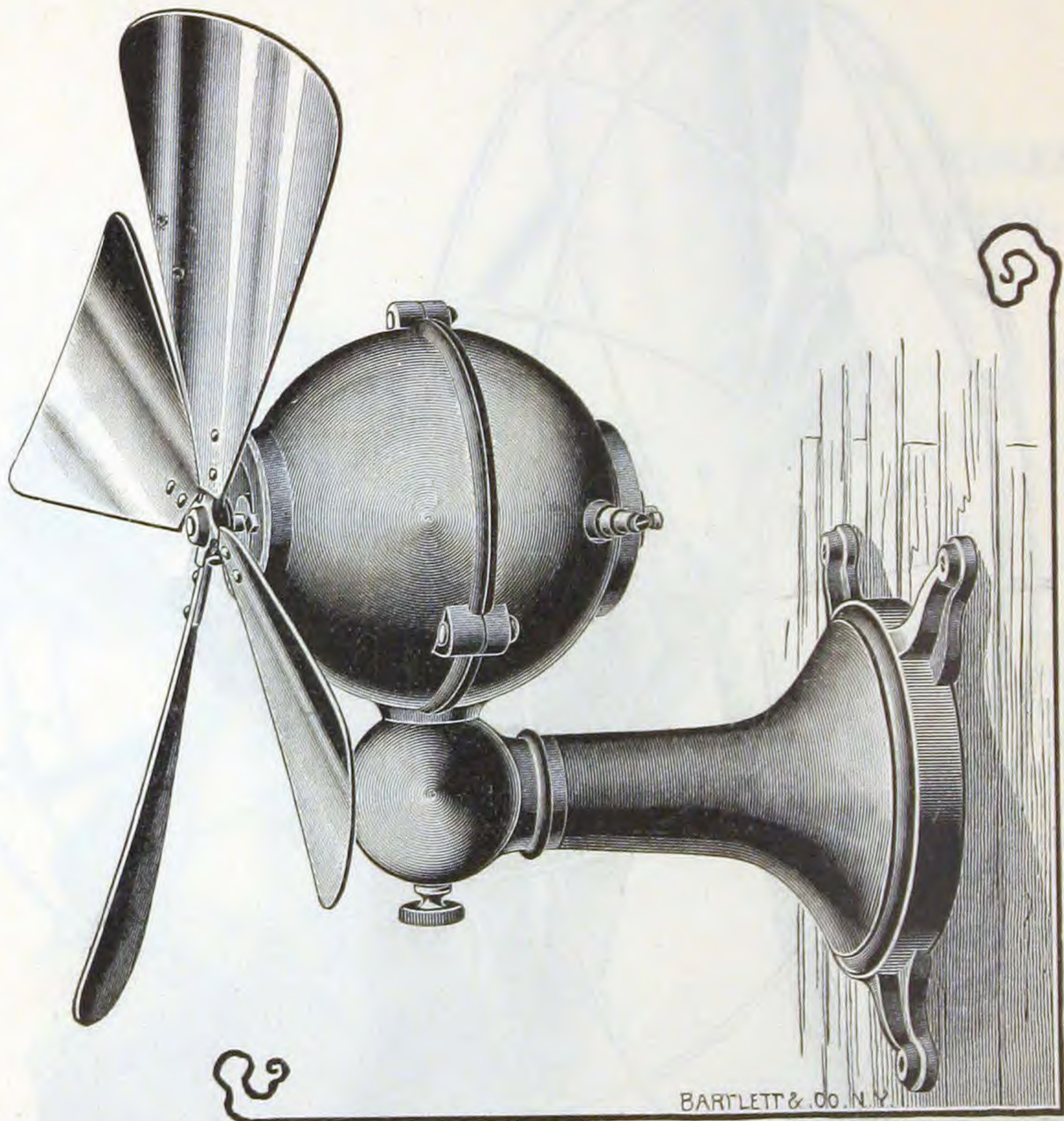
**Fan Outfit.**

Noiseless.

Cat. No.		Price.
12813	One-sixth H. P.—Lundell Fan Motor, with regulating switch, giving three speeds, viz.: 1,500, 1,200 and 800 revolutions per minute at 110 volts, for constant potential, incandescent, circuits up to 120 volts, self oiling and self-aligning bearings, japan finish; complete with 16-inch black japanned fan and guard....	\$43.00
12814	With polished brass fan and guard, and all other outside brass fittings polished...	44.00
12815	With nickel-plated fan and guard, and all other outside brass fittings nickel-plated,	45.00



## DIRECT CURRENT FAN MOTOR.



Cat. No. 12816.

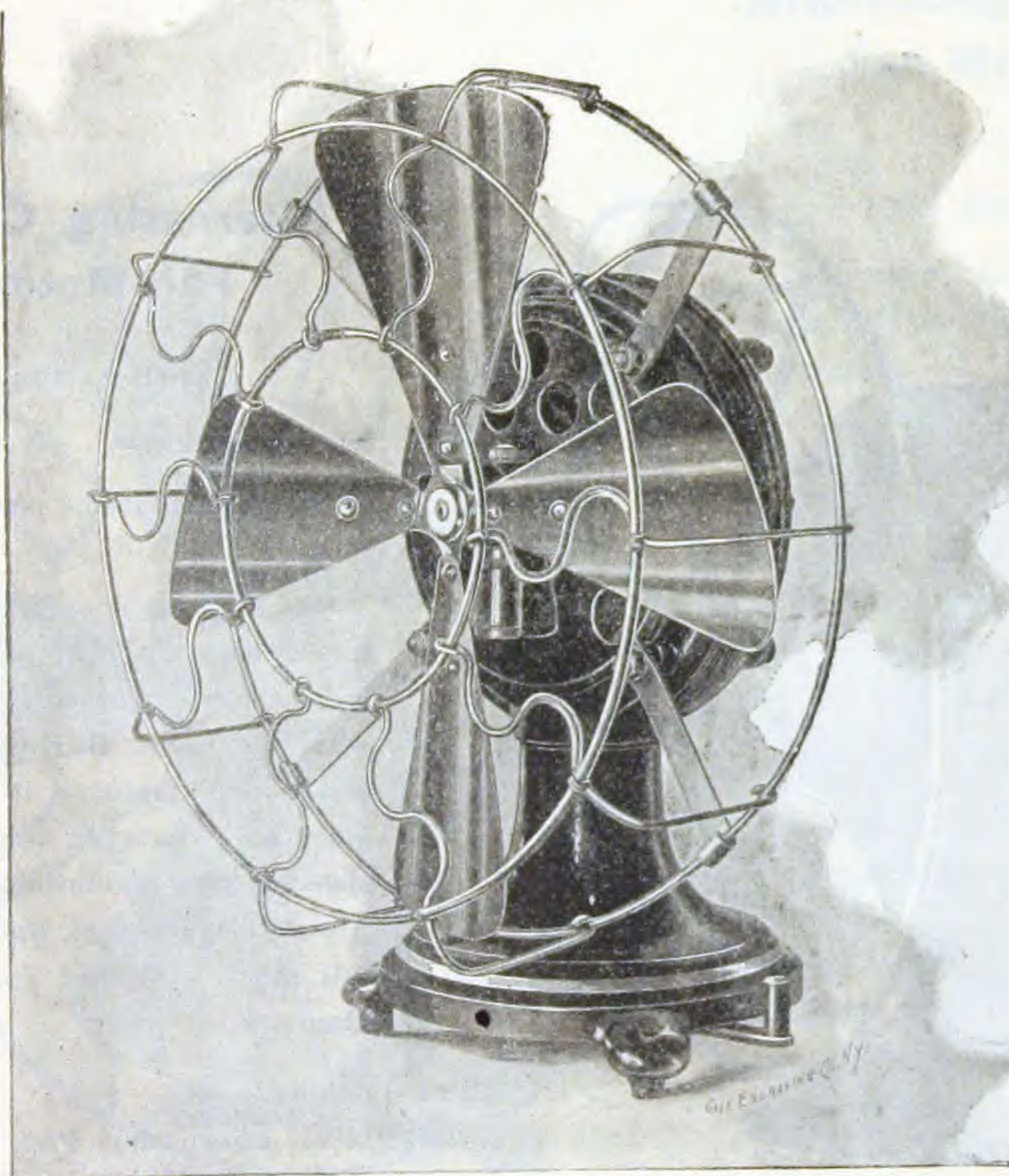
### Bracket Fan Outfit.

Noiseless

#### SPECIFICATION.

Cat. No.		Price.
12816	One-sixth H. P.—Lundell Fan Motor, with regulating switch, giving three speeds, viz.: 1,500, 1,200 and 800 revolutions per minute at 110 volts, for constant potential, incandescent, circuits up to 120 volts, self-oiling and self aligning bearings, thumb-screw for adjusting direction of fan, japan finish, legs of base drilled for screws; complete with 16-inch japanned fan and guard.....	\$43.50
12817	With polished brass fan and guard, and all other outside brass fittings polished...	44.50
12819	With nickel-plated fan and guard, and all other outside brass fittings nickel-plated	45.50



**ALTERNATING CURRENT FAN MOTOR.**

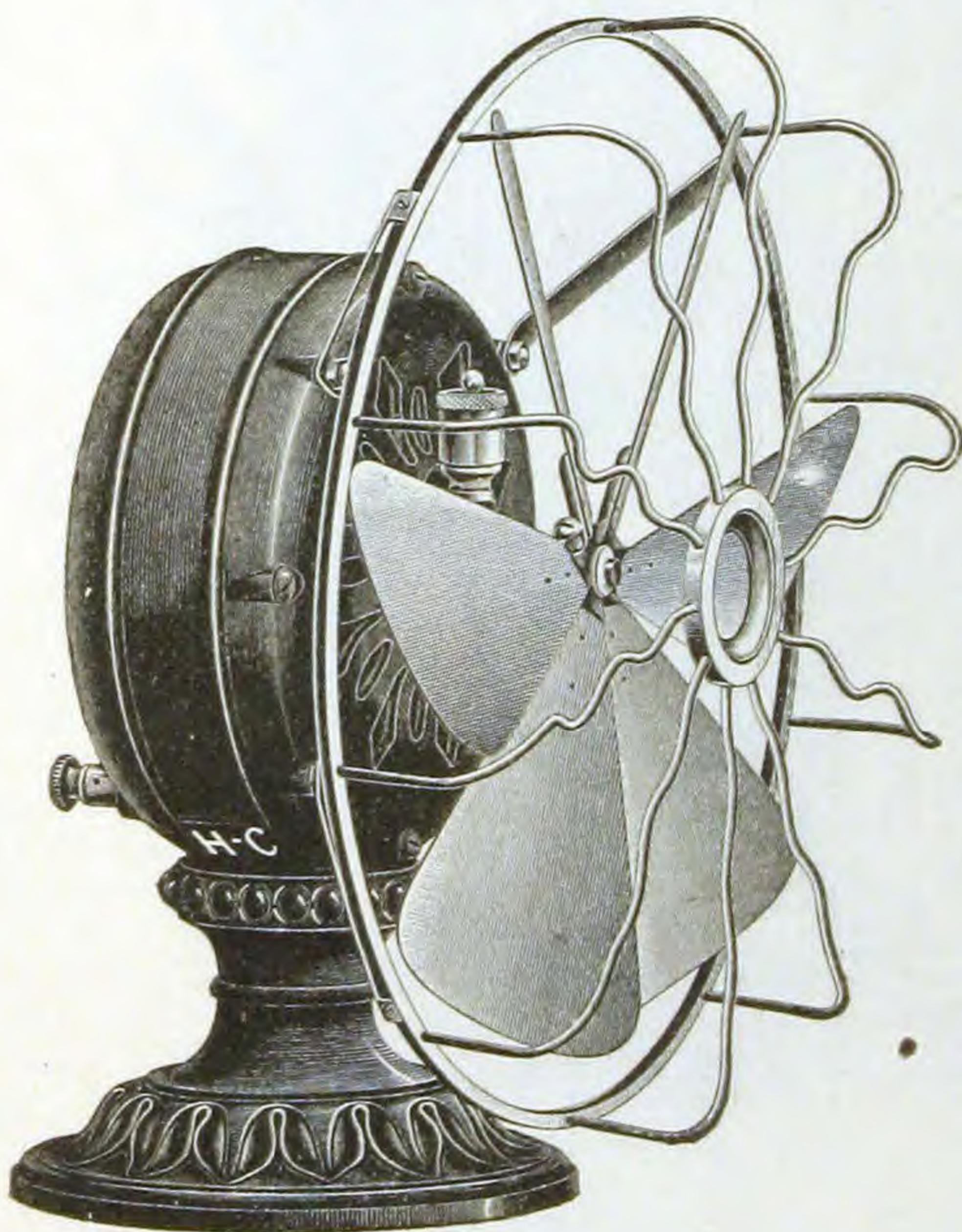
Cat. No. 12820.

**Lundell Alternating Fan Motor Outfits.**

Cat. No.	Price.
12820 High-frequency Motor—Wound for 52 and 104 volt circuits, 14,000 to 16,000 alternations per minute .....	\$42.00
12821 Low-frequency Motor—7,200 alternations per minute, wound for 52 and 104 volt circuits.....	42.00

The above Fan Motor Outfits are superbly finished in rich black japanning with gilt striping; fan guards and all outside brass fittings polished brass or nickel-plated. The motors have a starting and regulating switch giving three speeds, namely: 1,200, 1,600 and 1,800 revolutions per minute; self-oiling and self-aligning bearings.





Cat. No. 12822.

## Alternating Current Fan Motors.

Self-starting.

Non-synchronous. Constant Speed.

2,000 Revolutions per Minute.

This machine is specially designed for alternating current work, and will be found eminently satisfactory wherever used. Having no brushes and no commutator, it requires no attention whatever, and runs at a speed of 2,000 revolutions per minute. Absolutely noiseless, and finished in full nickel. Size of fan, 12 inches diameter.

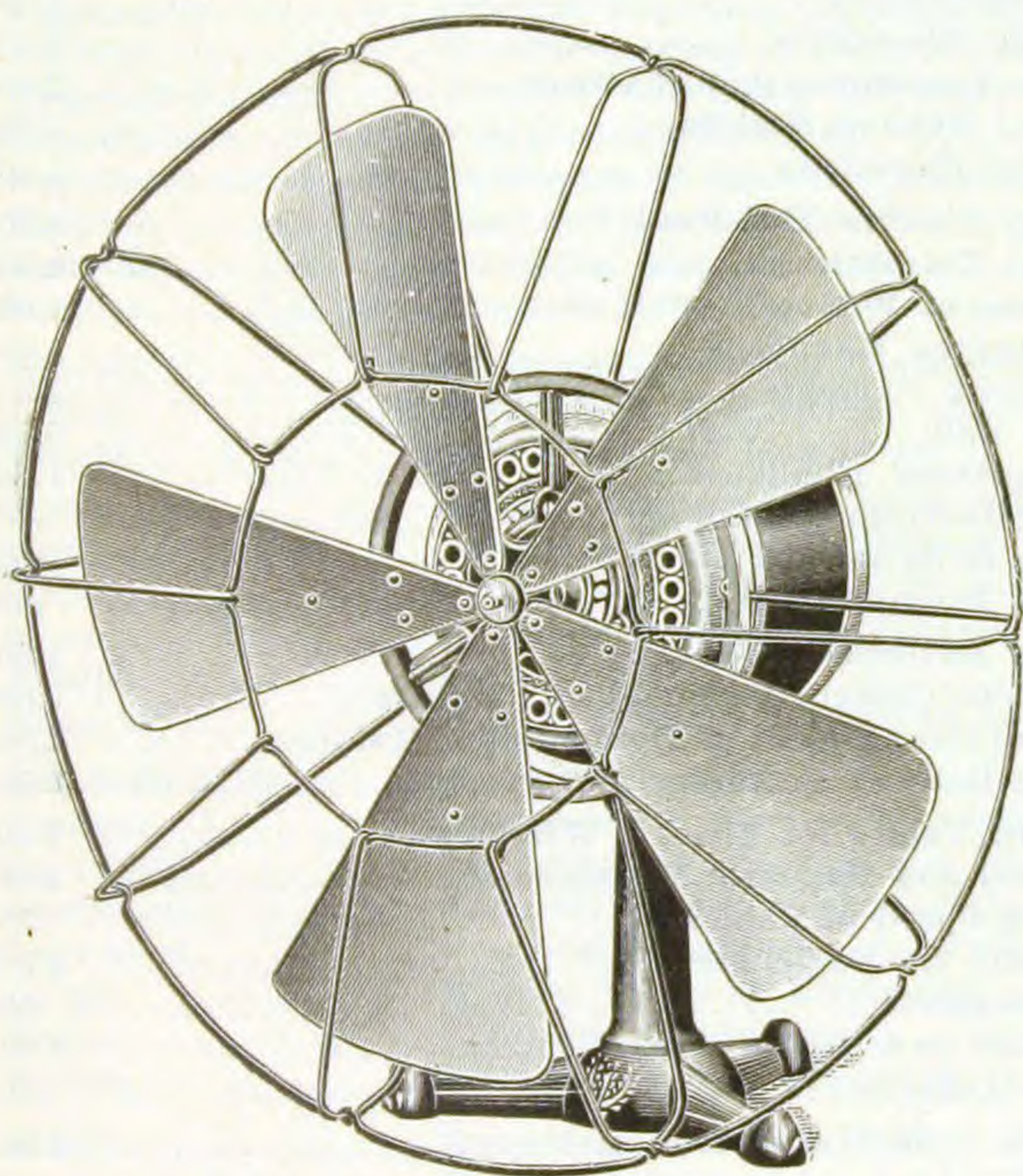
Cat. No.	Price.
12822 Alternating Fan Motor, 52 or 104 volts, complete with guard.....	..\$34.00



## Alternating Current Fan Motors.

### THE MESTON.

This motor has for several years held a high place in the estimation of the electrical trade, and for the season of '97 presents many new and desirable features. It is finished in polished brass; can be supplied with heavy guard, as shown in cut, with regular wire guard; all working parts completely enclosed. The speed of fan may be regulated at will by shifting the regulator stud, projecting through slot in front cover. Any desired speed up to 2,000 revolutions per minute may be obtained, and quantity of current consumed regulated accordingly.



Cat. No. 12823.

Cat. No.	Price.
12823 Meston Fan Motor, without Guard...	\$42.00
12824 Heavy Brass Guard, extra .....	6.00
12825 Light Wire Guard, extra .....	2.50



**BOOKS.**

	Price.
Abernethy.....Commercial and Railway Telegraphy.....	\$2.00
Allsop.....Electric Bell Construction.....	1.25
Allsop.....Electric Bell Fitting.....	1.25
Allsop.....Induction Coils.....	1.25
Allsop.....Telephones: Their Construction and Fitting.....	2.00
Allsop.....Electric Light Fitting.....	1.50
Anderson.....Lightning Conductors.....	5.00
Atkinson.....Elements of Electric Lighting.....	1.50
Atkinson.....Static Electricity.....	1.50
Atkinson.....Dynamic Electricity.....	2.00
Atkinson.....Electric Transformation of Power.....	2.00
Atwood.....Practical Dynamo Building.....	3.00
Ayrton.....Practical Electricity.....	2.50
Badt.....Dynamo Tenders' Handbook.....	1.00
Badt.....Electric Transmission.....	1.00
Badt.....Incandescent Wiring.....	1.00
Badt.....Bell Hangers' Handbook.....	1.00
Bedell & Crehore.....Alternating Currents.....	2.50
Benjamin.....Voltaic Cell.....	5.00
Bonney.....Electroplaters' Handbook.....	1.20
Bottone.....Electric Instrument Making.....	.50
Bottone.....Electric Bells and All About Them.....	.50
Bottone.....Electric Motors.....	.50
Carhart.....Primary Batteries.....	1.50
Cox.....Continuous Current Dynamos and Motors.....	2.00
Crocker & Wheeler....Practical Management of Dynamos and Motors.....	1.00
Crosby & Bell.....Electric Railway in Theory and Practice.....	2.50
Davis.....Standard Tables for Electric Wiremen.....	1.00
Day.....Electrical and Magnetic Measurement.....	1.00
Dearlove.....Working Speed of Cables.....	.75
Desmond.....Electricity for Engineers.....	2.50
Dolbear.....The Telephone.....	.50
Du Moncel.....Electricity as a Motive Power.....	3.00
Du Moncel.....Electro-Magnets.....	.75
Ewing.....Magnetic Induction of Iron.....	4.00
Fahie.....House Lighting by Electricity.....	.80
Fahie.....History of Electric Telegraphy.....	3.00
Fiske.....Electricity in Theory and Practice.....	2.50
Fleming.....Short Lectures to Electrical Artisans.....	1.50
Gilbert.....De Magnete.....	4.00
Gore.....Art of Electro-Metallurgy.....	2.00
Gore.....Electro-Chemistry.....	.80
Gore.....Electric Separation of Metals.....	3.50
Guillemin.....Electricity and Magnetism.....	8.00
Halliday.....Design of Small Dynamo.....	1.00
Haskins.....Transformers.....	1.25
Haskins.....Galvanometer and Its Uses.....	1.50
Hawkins & Wallis....Dynamo.....	3.00



**Books—(Continued).**

	Price.
Hedges.....Continental Electric Light Central Stations.....	\$6.00
Hedges.....American Electric Street Railways.....	5.00
Hering.....Dynamo Electric Machines.....	2.50
Hering.....Winding Magnets and Dynamos.....	1.25
Hering.....Universal Wiring Computer.....	1.00
Hering.....Recent Progress in Electric Railways.....	1.00
Hopkins.....Telephone Lines.....	1.50
Hopkinson.....Dynamic Electricity.....	.50
Hopkinson.....Original Papers on Dynamo Machinery.....	1.00
Hoskiar.....Electric Testing of Electric Cables.....	1.50
Hospitalier.....Domestic Electricity for Amateurs.....	2.50
Hospitalier.....Polyphased Currents.....	1.40
Houston.....Dictionary of Electrical Words, Terms and Phrases.....	5.00
Houston.....Electricity and Magnetism.....	1.00
Houston.....Electrical Measurements.....	1.00
Hughes.....Magneto Hand Telephone.....	1.00
Jackson.....Electro-Magnets and Construction of Dynamo.....	2.25
Jenkin.....Elementary Electricity.....	.40
Jenkin.....Electricity and Magnetism.....	1.25
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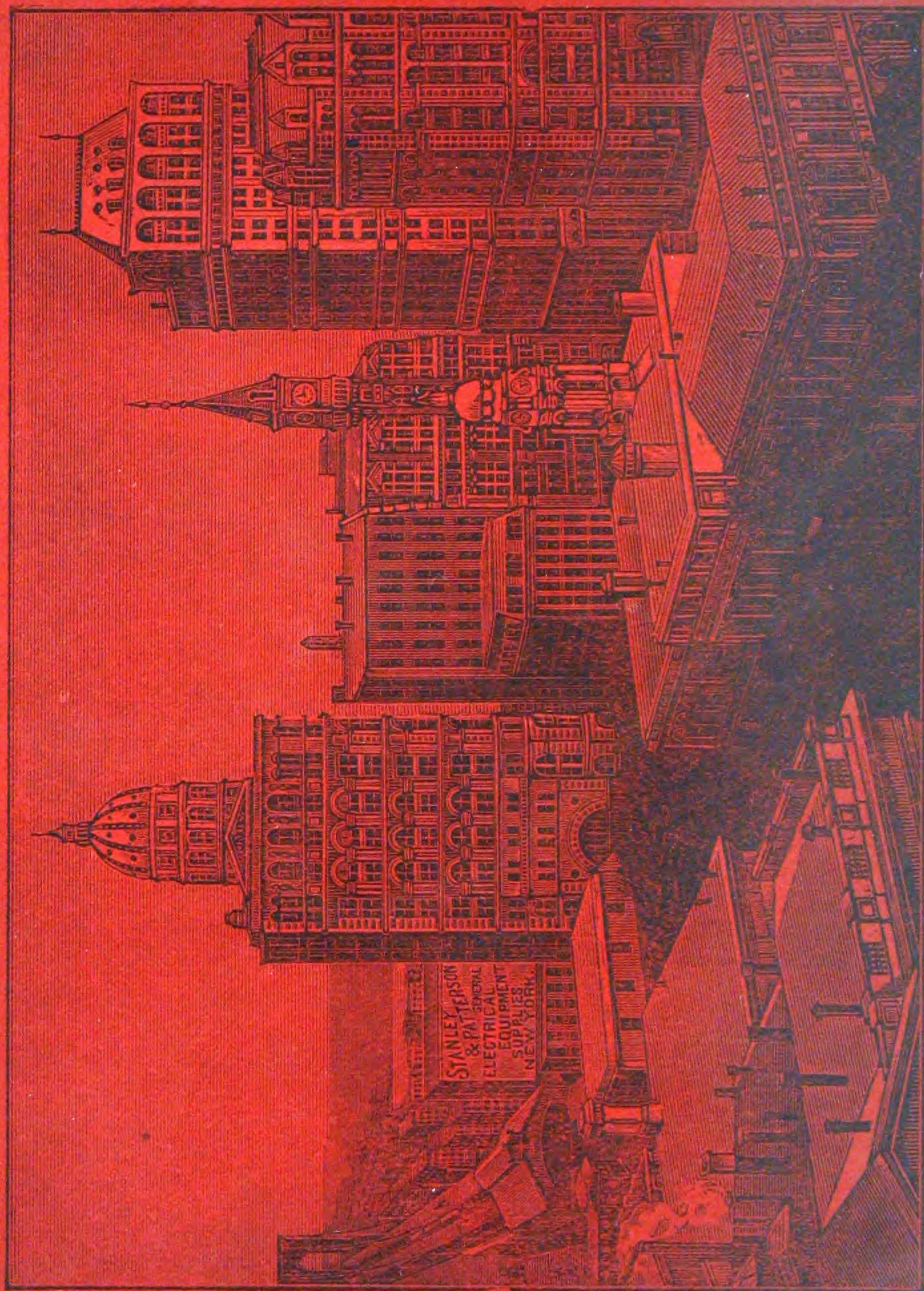
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Brooklyn Bridge.

Court House.

World Building.

Sun Building.

Tribune Building.

Times Building.

Stanley & Patterson.

American Tract Building.

VIEW OF THE CITY HALL AND THE NEWSPAPER BUILDINGS ON PRINTING HOUSE SQUARE.